Camas

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Number 3 *Fall 1997*

Article 1

Fall 1997

Camas, Fall 1997

Camas

People and Issues of the Northern Rockies

VOLUME 1, NUMBER 3 $4.00

The Teller Issue

FEATURING

Neosho
by Dan Crockett

Manu
by Christine Paige

Reflections
by Judy Blunt
and
Ron Carlson

Acknowledgments

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Finally, heartfelt thank-yous go to Kelley Segars and to Mark Watkins at Freddy's Feed & Read for their continued support.

Camas Staff

Corrections

In the summer issue, the final paragraph from Janisse Ray's "If Walls Could Sing" was not printed. In a perfect world, the reflection would have ended: "In the cabin, I start listening to the wood around me, silent at first, then starting to sing—log walls, desk, table, wooden spoons. Then the paper towels begin tapping, a downy wood pecker at spruce bark. The paper is rustling pine, yellow stretch of glacier lilies. If I'm quiet enough, I can hear them back."

We invite submissions of article ideas, prose and artwork. Please enclose a self-addressed, stamped envelope with your submission. Thanks.

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Subscriptions for Camas are available at $13 per year or $21 for two years. Back issues are also available for $2 each.

Look what you've missed!
Summer 1997:
Community and Agriculture
Spring 1997:
Mining
Fall 1997:
The Teller Issue

Cover Photo by Kate Vister

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Editor's Note: The following letter from a former Camas staff member serves as the first installment of our new "letters to the editor" department. The name for the department emerged from the postscript of the letter. This letter also inspired the "Famous Last Words Department," found on page 45.

Dear *Camas*:

Thank you for the recent issue of *Camas* and the accompanying letter. I was intrigued to receive your invitation to comment on the recent changes in emphasis from creative writing about the environment to regional issues.

When I first received word of the change, in the introduction to the previous issue, I found myself oddly at a loss. I debated whether I really wanted to re-subscribe—after all, the journal was changing from the young creative outlet Jenny, Christian, and I first created in a very different venue.

This summer, I realized that my resistance to supporting the change had little to do with the actual form the journal was to take or the identity it was leaving behind. I found that my resistance had less to do with the new idea than with changes to design and content that I had been largely responsible for creating and nurturing. In embracing the new *Camas,* I had to let go of my ego; that was the hang-up. Once I let go of my own investment in what *Camas had been* and embraced the notion of what the journal *should be* I found myself quite pleased with its new direction.

Having reviewed the recent issue on people and issues of the Northern Rockies, I would like to offer a few comments.

First, while the focus of *Camas* on regional affairs is appropriate, room should be retained for some creative fiction and poetry. Purely creative works have a place in conveying our understanding of the world we live in. I was a little disappointed to see these forms of writing so completely removed from the contents.

It would be a fine touch to accent the new focus with continuing sections of poetry and creative prose—even if just one prose piece and several poems were included in each issue. At the least, a poem is always good for the back page, and it helps removed the hardened edge with which we are often left when dealing with the degradation of our environment.

Second, I long sought a forum for comments, a readers' corner which could foster feedback from readers. Such a forum can develop connections between the journal (including its staff and future issues) and the readership. Engaging reading in dialogue about the articles, ideas, art, or notions that they find interesting, compelling, or offensive allows the editorial staff to respond to readers' interests while allowing other readers to find out how they are reacting to the contents of the journal.

I am flattered that *Camas* has come full circle to return to an original vision six years ago. That the journal is alive at all after six years (in its fifth year of publication) is a pleasure. That is not the ordinary outcome of juvenile journals with itinerant student staffs!

Thank you for your consideration,

Kurt Menning
Lafayette, California

P.S. You may be humored to know that in our debate over the name of the journal, I was a proponent of *Huckleberry Wine*. I think we made the right choice! Viva *Camas*!

REFLECTIONS

Riding the Surface

by Judy Blunt

"If there are no trees,
how do you know it's Fall?"
—quote from conversation
with an out-of-county hiker

October, Phillips County, Montana. From the Midale road south, this land looks scrubbed gray and sent to bed sullen. Only the top cover shows: big sage, silver sage, hardpan and cactus-like a scatter of frayed knots on an old patched quilt. Dead flat and flat dead, you say. It's deceptive, this land. Ride it horseback and half an hour out, you're gone, invisible, off the edge in a wallow of hidden contours.

In the sheltered draws, hidden in the lee of rocks and sage, you'll find what the antelope find—prairie sandreed, broom snakeweed, threeawn, sagewort, junegrass, wheatgrass, needleandthread, all stalk and stem now, empty of seeds. If you think to get off and squat with the reins in one hand, you will touch what drew generations of buffalo away from easy pasture. There, beneath the sparse guard hairs, lives the short grass prairie, a turf of wooly plantain and blue grama, the buffalo grass. By autumn, it has curled tight to the ground, tiny blades like a mat of crossed arms, folding and waiting.

Survivors in this rigid landscape learn one of two things. If they are big, they drop taproots like anchors and settle hard against the wind, taking what they need from deep below. If they are small, they ride the surface, bowing to the uncertainty of seasons. Native grass is like that—willing to lie dormant when the rains don't come, able to move quickly on the strength of one good storm. Stand up, and it blends into the patchwork of prairie sod like a maze of tiny stitches. Look up and it's gone. From a distance, you cannot hold this land together.

Sketch by Sara Hyman

Judy Blunt teaches writing at the University of Montana. A book of her essays is forthcoming from Knopf.

Say Hello to Copper Bob

by Ron Carlson

This tale is as tall as a man on a horse
standing in the wind on the Devils' Forehead.
Ladies, let me say I could learn to love to ride;
we'd come across the Devil's Sideburn,
stepping through the tricky shale,
above the Devil's Upper Lip and Moustache,
where we stopped to let the sweat dry
and map our way to your sweet dale.
We've come all the way from the Devil's Shin Bone,
two days alone, figuring to be here for dinner,
if you please, having crossed the Devil's Pelvis,
where it forks near Devil's Rise
and Devil's Falls. We've passed Devil's Pass
and the Devil's Hairy Ass,
pardon my language, Dears.
(That's what the locals call the Devil's Rear.)
Frankly, it seems old Satan climbed
these hills first and named them all.
God only got the sky and Angel Draw,
and that's two counties south,
well past Hell's Gate, Satan's Door,
and Demon Portico. Further
than we'd like to go, just now.
So Hello! In a country where there are forty ways
to curse a man and just three ways to bless him,
I hope you'll say hello
to me, and to sweet Copper Bob,
for he is the horse I rode in on.

PHOTO BY CHASE REYNOLDS EWALD

Ron Carlson is the author of five books of fiction. His most recent is the story collection The Hotel Eden *(W.W. Norton). He writes two poems a year. This one was written after a week at Breteche Creek Ranch above Cody, WY. He teaches writing at Arizona State University.*

REFLECTIONS CONTINUED ON P. 40

Neosho

by Dan Crockett

My father and I ran side by side as afternoon slanted toward evening. The aqueous air hummed with smells; here an oxbow of wild plum, there a slough of honeysuckle. We moved wordlessly, footfalls crunching on the flinty brown gravel of the narrow road as we threaded through the puddles left by last night's thunderstorm. Hills stretched before us, rising with a pitch and frequency completely out of keeping with the billiards-table landscape Kansas conjures in most people's imaginations. Our scissoring legs and the wings of a flycatcher stirred the only wind.

Butterflies clustered in the baking mud. Blues and cabbages and sulfurs pulsed like shards of sky and cloud and sun, a reflection more shimmering than wind-riffled rainwater. As we passed, they rose as if to resume their places above us. The blues swirled in tight eddies around our calves while the sulfurs lilted away with the erratic giddiness of bohemian waxwings buzzing on fermented mountain ash berries. A little farther along, six zebra swallowtails lay in a loose crescent, wings open like chapbooks of poetry, tongues probing warm silt. One of them lifted and danced along with us, then caught a thermal and was gone over the treetops.

The butterflies are not allegories—only what we saw as we ran together. I felt them in my throat, but my chest flapped with the solemn cadence of a great blue heron heading downriver. There was no vision, no premonition. I simply knew with the sureness of moonrise that my father carried the cancer in his lungs that would kill him. He knew it, too. And knew that I knew.

A skinny two-track swung away from the road, and we swung with it, each of us taking a rut, gradually corkscrewing up through the delicious shade spun by a phalanx of Osage orange trees. The cicadas and mourning doves creaking and cooing in the hedgerows did not sound like a dirge any more than sax-man Sonny Stitt blowing the blues sounds like sorrow unmitigated by joy or love. At the crest of the hill, we passed beneath a moss-freckled limestone arch. The full blare of light and heat staggered us slightly as we emerged into a clearing sprinkled with headstones. The simple graves bore the names of perhaps three dozen families. At least half the markers were chiseled in the previous century, but these blurred and softened rectangles threw shadows so stark we hurdled them almost reflexively as we looped the perimeter of the cemetery. Without pausing, we turned and headed back toward the river.

Seven months later, on another hilltop a dozen miles away, my father's body went back into the earth.

Wracked by pain and the prospect of death, the supple brown bends of the Neosho salved his soul. He took the position that there was sufficient beauty and wonder in this world to warrant every effort to keep one's senses honed and engaged. Mostly, he wanted to have lived fully and well, to have been a good person. But he did embrace the ancient hope that the place one's spirit dwells on in life might become the place where it dwells in death.

After eleven years, I remain unequipped to say whether his soul mingles with the fog rising off the Neosho. But only there do my memories of him retain both the slightly serrated edge that defines the rim of a spent river clam's half-shell and the luminous mother-of-pearl glow that winks up when you turn it over in your hand.

I caught a black-speckled, fork-tailed, silvery-spangled beauty of a fish on a tight-line baited with garden worms. For a person bewitched by trout and lambent water, someone who involuntarily scans for seams and foam pockets in the rivulets that flash down suburban gutters, those words send the mind roving around the gallery of salmonids. Failing to pinpoint a match (steelhead have square tails, lake trout are too green), one nudges the circle wide enough to take in grayling. It's a pretty fair sketch, really. But no one would describe grayling without mentioning their peacock dorsal. And the sailfin aside, they lack one definitive feature: whiskers. For when my father wrote those words in a memoir a few months before he died, he was describing his first channel catfish.

They truly are beautiful. And this particular channel cat was all the more lovely for the fact that Dad caught it as the result of a seminal decision. He started his fishing day jostling with a pack of other freckled and sunburned kids at the town lake in Emporia, Kansas. The carnival atmosphere of a kid's fishing derby transformed the homely lake into a macrame of lines and cacophony of hollers. Small carp, bullheads and bluegills flopped amid powdery dust. In the great Huck Finn tradition, Dad turned his back on all this and fled for the cool wild banks of the Cottonwood River, not far from where it joins the Neosho. He was rewarded with peace and a strange, shimmering fish. Imagine how he must have felt trotting back to the town lake to have the man running the derby identify his catch and guess its weight (somewhere around three quarters of a pound). Given this beginning, and the obvious rapture in my father's sketch of a channel catfish, the simple words that followed come as no surprise. He wrote: *My fate was sealed*. In truth, I suspect that seven-year-old boy felt something less than the thunderclap of revelation. More likely, he simply basked in a pure, all-is-wonderful glow—the same glow that fishing continues conjuring long after childhood has passed. But it was a defining moment for my father. There on the Cottonwood, he found the confluence of three passions which would shape his life: a love of wild fish, rivers and solitude. Though I can't say they all came together in such an epiphany, those same passions have fundamentally informed how and where I've chosen to live.

The eastern edge of the Flint Hills, with its remnant tallgrass prairies, decants the water that becomes the Neosho. With the easy disposition of a grassland creek, the river larks along for the first 20 miles or so. Then it meets its first dam and temporarily becomes Council Grove

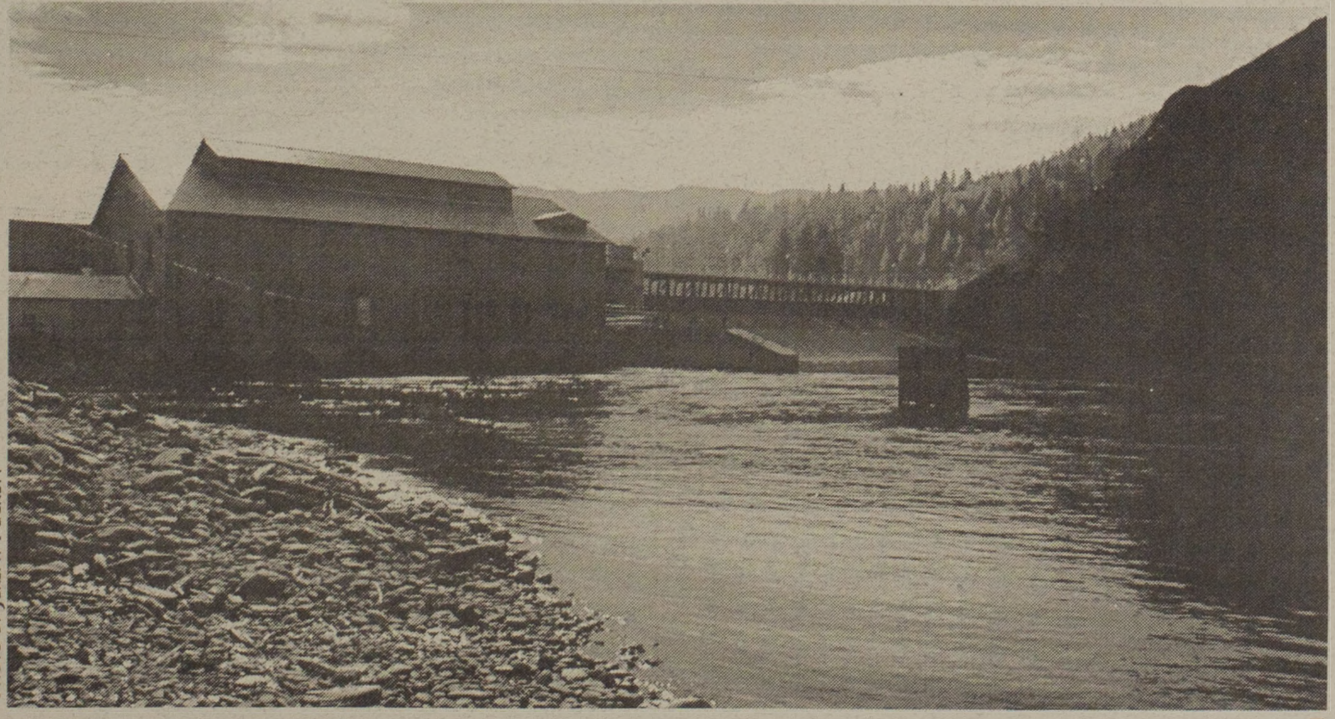


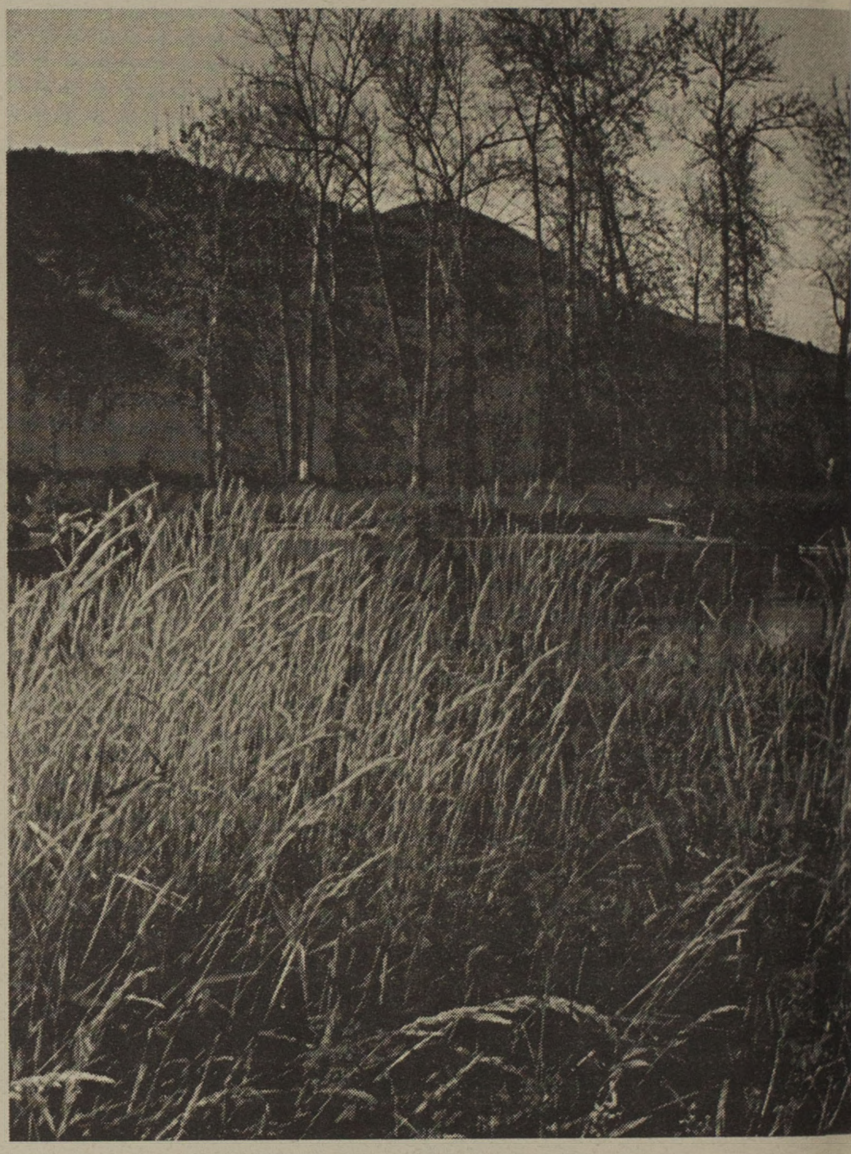
PHOTO BY JEREMY PUCKETT

Lake. Free once more, the Neosho meanders quietly for the next 30-odd miles, accepting the gifts of creeks here and there until its confluence with the Cottonwood River. Grown suddenly muscular, it struts for perhaps ten miles before again meeting its own stopped waters at John Redmond Reservoir. When it emerges, the river rambles unfettered for more than a hundred miles, jagging south, east, south, as if it can't decide whether to go to Missouri or Oklahoma. Finally, it goes to Oklahoma and is soon stultified by the sprawling Grand Lake O' the Cherokees. After navigating two more labyrinthine reservoirs with the tentative gait of an old dog beset by cataracts and fused joints, the Neosho gives up its waters and its name to the Arkansas River. About the time the Arkansas leaves Oklahoma, it sheds the dulled skin of artificial lakes and resumes the character of a river, however channelized, once more. From here, the mingled waters of the Neosho flow on southeasterly to the Mississippi and beyond.

Once in November when only one of the 14 gates at John Redmond Dam was cracked open, I stood peering into the flinty riffle below the hole that has inspired a special catfishing confidence in our family for nearly a century. I could distinguish individual rocks and broken clam shells down to a depth of perhaps a foot. Beyond that, everything dissolved into a vague shimmer. On a cloudless spring day, with the sun glinting obliquely, the river could look almost cerulean. Sometimes at sunset, the surface roared like hammered brass. Mostly though, the Neosho was brown. A friendly, well-creamed-coffee brown.

I liked to imagine the river flowing with the clarity of a perfect metaphor. Before simple iron plows first upended this lush prairie. Before fire became a dreaded foe. Before engineers straightened the creeks, leaving the old streambeds lying in scabbed loops, looking from above like graceful calligraphy of a forgotten language. Before cattle trampled creek banks and left them innocent of plants save for a few scraggly thistles. Before canals and pumps reduced rivers to shrunken husks during the hottest season. Before the last row of crops stopped as close to the creek as the combine could maneuver. Perhaps then the river ran clear.

Yet the record is murky. In *Indian Place Names*, John Rydjord reviewed possible definitions of Neosho ranging from clear, cold water to dirty water. But in *The Osages: Children of the Middle Waters*, a monumental attempt to describe the original lifeways of the Osage people, anthropologist John Joseph Mathews gave the Osage definition of their word as, *water-the-color-of-a-summer-cow-wapiti*. The coats of elk in summer are not translucent. They are a rich, ruddy brown. So perhaps the Neosho has always carried the fertile soil suspended in its currents.



One thing the river hasn't always done is wallow sluggishly through 645,000 acre-feet of its own stilled water. When the U.S. Army Corps of Engineers completed what was originally known as Strawn Dam (named for a town which

PHOTO BY JEREMY PUCKETT

now lies underwater) in 1964, its stated purpose was flood control. But as Aldo Leopold noted half a century ago: "Flood control dams have nothing to do with the sources of flooding." The Corps subsequently renamed the dam and reservoir after John Redmond, longtime publisher of the *Burlington Daily Republican*, the newspaper in my grandfather's hometown. Throughout his career, Redmond was a great champion of taming the Neosho. In a brochure promoting the reservoir that bears Redmond's name, the Corps of Engineers proclaimed: "The fertile Neosho Valley was flooded 57 times in 34 years." Painting these 57 events as unnatural aberrations, the Corps drew no connection between "floods" and the valley's fertility.

In an ironic but common scenario, the dams that created John Redmond Reservoir and Council Grove Lake advanced knowledge of the area's prehistoric peoples. Once a place is condemned to be permanently altered by a dam, highway or subdivision, a desperate branch of research called salvage archaeology kicks in. As part of mandatory efforts to mitigate the loss of raw land, researchers rush in to learn what they can of people who knew these places in earlier times. In the summer of 1963, archaeologists unearthed three major sites which would be inundated within months, including one end of a long, extended community which possibly ran for as much as a mile to the north. They discovered projectile points, bifacial knives, drills, chipped stone axes, metates and abraders dating back as far as 5,000 years. Among these implements were the remains of fish and turtles.

The connection between these prehistoric people and those living in the Neosho Valley when Europeans arrived is unclear. But most anthropologists seem to agree that the Osage were the preeminent people dwelling along the Neosho when white men first ventured there.

John Redmond Dam went in about 11 miles above the stretch of river most beloved by my father, grandfather and great-grandfather. Since then, the river has been forced to sniff its way through 16 miles of impoundment before being allowed to proceed in increments determined by the Corps of Engineers. This is the only way it's ever been for me. But Dad knew the Neosho as a free-flowing river for more than 30 years. He described it as a series of riffles, where water usually danced two to four feet above limestone or flint, alternating with deep, mud-bottomed holes. He also spoke of the river as something graceful, rising and falling with the rhythms of the seasons and the whims of weather.

During the time we fished it together, the Corps yo-yoed the river up and down with maddening frequency and magnitude. Whenever the Corps decided to open more gates, air-raid style sirens at the dam and four miles downstream in the town of Burlington announced the imminent rise. I won't say we dreaded that wail in the same way the citizens of London did during World War II, but we despised it nonetheless. The degree of difficulty involved in fishing the river rose in direct proportion to the water level. Worse by far, there was an almost perfectly inverse relationship between the number of gates open at the dam and the likelihood of catching large flathead catfish.

Beyond the tentacles protruding from their face, what makes these fish look so peculiar, some might even say monstrous, is the bluntness of their head. From the side, it presents the low, flat, splitting-maul taper explicit in the name. But from above, it offers no more curvature than the furrows behind a plow. If a flathead swam into a wall, its entire lower lip would come in full contact. This nearly total lack of both a forehead and a nose conspires to make the flathead's mug seem preternaturally wide, like the front end of a '62 Chrysler Imperial. Curiously undersized, bulbous eyes cling to the outer edges of the head, looking as if a child had pasted on a pair of thickish buttons. An undershot jaw invests the face with an air of belligerence, and the great wide mouth appears set in a perpetual scowl. That is, until the jaw swings open to reveal a huge black void.

Of course, none of this flat-headed business has anything to do with what most folks call them. Where we fished, anyway, they were known universally as yellow cats. Their bodies aren't yellow like goldenrods, but in a mottled, brownish, oliveish sort of way like the belly of a brown trout. Like big brown trout, yellow cats dine almost exclusively on fish. Fierce predators, they eschew the fetid dead tissue so savory to channel catfish and blue catfish, insisting that their meat be the catch of the day. It is this taste for fresh fish that trotliners exploit.

Dad liked to set his trotlines in deep holes bracketed by extensive riffles. He believed the big yellow cats prowled into the riffles to hunt, but spent most of their time lounging on the bottom of the deep holes. Insinuating a few choice young carp into such holes was like carrying a steaming pizza into someone's living room. The big yellow cats might not be actively feeding, but there's a tasty carp and, oh, what the hell.

> He also spoke of the river as something graceful, rising and falling with the rhythms of the seasons and the whims of weather.

As with so much of fishing, prospecting for the tenderloin of the hole hinged on hunches. Once Dad decided about where he wanted the line, we hunted along the bank for a stout but springy root. He considered a sycamore root about forearm-thick ideal. He tied one end of the trotline to the root, then rowed across to the opposite bank and repeated the process, letting the line belly just a little in the current. At 500-pound-test, this tan braided nylon was nightcrawler thick. Once satisfied that it was well rooted, we started back across, tying on drop lines. These consisted of a two-foot length of 250-pound line (about the size of the laces on logging boots) with a 5/0 bronze hook on the end. Long as my thumb, with points like owl talons, these hooks went through the back of a four- to six-inch carp, just behind the dorsal. We left about six feet between baits, and after every second or third set, we tied a brick to anchor the baits down where the big catfish lay. The tautness of the trotline and weight of the bricks also helped hook a fish when it took a bait.

We also set a few limblines. Finding a strong, but supple willow branch which reached out over a promising slice of river, we would hang a single vertical line bearing weight rock and limbline baits vertically from a tree whose branches reach out over the water. The bricks kept our trotlines on the river bottom despite radically fluctuating flows, but the limblines didn't fare so well. I have pictures of desiccated crawdads and fingerling carp suspended like macabre piñatas two feet above the river. Twenty-four hours before, these limbline baits had wriggled five feet underwater.

The fact is, both trotlines and limblines have more in common with traplines than, say, flyfishing. You run the lines at dusk and again at dawn, cursing the creak of an oarlock and slipping fresh-caught fish into wet gunny sacks to mute any thumping on the bottom of the boat. Yellow cats don't like noise. An air bladder connected to a filigree of tiny bones just behind their head acts as a highly attuned eardrum. Thunking one of your weight bricks against the side of the boat would be akin to whanging a gong to announce your intent to still-hunt an oak bottom for whitetails.

My grandfather set a week as the absolute minimum trotlining time if we hoped to catch anything sizeable. He liked to tell of the summer when a pair of his friends, local trotline masters Henry Rainbolt and Charlie Welch, went 28 days without boating a fish. On the 29th, they caught a 57 pound behemoth. The biggest yellow cat my father caught, a 49-pounder, came on the final morning of a completely fishless weeklong trip. Such a fish might be half-a-century old. It has felt the bite of more than one hook, and come to distrust commotion. So you try not to make any more noise than the breeze turning over cottonwood leaves. You come twice a day, replenishing baits as needed and hoping you've caught something. Of course, the trapping analogy breaks down a bit here. As anyone who loves to fish knows, the terrible wonders that lie between a fish hooked and a fish caught are the soul of the whole matter.

In Franklin Burroughs' exquisite collection of essays, *Billy Watson's Croker Sack*, Burroughs relates that in the part of South Carolina where he grew up, trotlines were legal for certain species of fish at certain times of year, but were so commonly used by poachers that to call a man a "trotliner" might, if the man were sufficiently thin-skinned, seem tantamount to an indictment. On the stretch of the Neosho we fished, though, trotlining was regarded by most as an upstanding pastime. Certainly there were venomous thugs who rustled other people's lines deep in the night. But they were the only trotliners who skulked.

"Noodlers" were slightly more suspect. They dispensed with hook, line and sinker altogether. Noodlers reach up under logs, rocks, wrecked car bodies and such, hoping a big catfish will try to eat their hand. Once grabbed, a noodler grabs back, and attempts to hang on through the ensuing commotion. Long the province of the most backwoods elements, noodling has recently become a sort of extreme sport for rednecks. In the past year, it has been celebrated in such unlikely places as *The Atlantic Monthly* and *The Wall Street Journal*. And noodling has attained cachet among the same set of six-figure-a-year urbanites who pay handsomely for the chance to spear or knife a wild boar. Some modern noodlers go so far as to emplace made-to-order catfish boxes (think lobster traps) in reservoirs, then scuba down to harvest their catch.

Although we recognized trotlining as a fairly primitive form, we tended to regard it as still, fundamentally, fishing. Even with its similarities to trapping, we still imagined that we caught the fish, not vice versa. Noodling struck us as something stranger, more akin to alligator wrestling. Besides, if we caught a snapping turtle or water moccasin or gar, we simply cut the line.

To get to the spot where Dad and I camped and kept our boat, we first had to visit Rainbolt's Bait & Tackle. We climbed a half-dozen splintered steps and clumped across the heavy gray planking of the porch. Inside the door, a moist,

cool darkness suggested the mouth of a crypt. While my eyes adjusted, I tasted the effervescent tang of great concrete minnow tanks churned by oxygenators the size of fire hydrants. Behind this was a piscine musk, interlaced with hints of licorice, cigarette smoke and mouse turds. Now I could see the heads. Nailed to every post and beam were the shellacked heads of huge yellow cats. Their carnivorous mouths hung agape, protruding jaw thrust open in a manner that gave them a look of utter contempt. Stiffened barbels jutted and curlicued like the mustachios of turn-of-the-century Mexican revolutionaries.

Oaken grids worn smooth as driftwood cradled an assortment of sinkers ranging up to quarter-pounders. Here, too, were hooks so outsized they would seem more at home lashed to a stout hoe handle than the end of a line. Soon enough we would fill the five-gallon pickle buckets with carp as long as my hand. But first we needed to secure the key that opened the padlock on Pierson's gate. Bob and Bobby Rainbolt were entrusted with controlling who fished and hunted on Pierson's land. Since three generations of Rainbolts and Crocketts had trotlined the Neosho together, the key was freely given, along with the latest intelligence on conditions.

Beyond the gate, the road dipped and rose through a thick patch of hackberries, hickories and walnuts with the symmetry of a flicker's flight. Then it came out of the trees, swooped more steeply and climbed to the lip of a bluff. Half a mile away, the river glinted like oiled wood through the tops of sycamores and cottonwoods, moving inexorably, trailing constellations of woodlands amid the blank spaces of pastures and croplands.

Jumbled and buckled hunks of limestone, fragmented sections of old sea floor, defined the ridge line. Many of these rocks were lavishly encrusted with detritus from that shallow ocean. Sea lilies (crinoids), sponges and assorted crustaceans scattered so profusely through some slabs that the stone itself seemed little more than a bonding agent like the sculptures my four-year-old daughter concocts using Elmer's and a hodgepodge of dried beans. Trilobites, those ancient, funky arthropods that always reminded me of sow bugs, were the Holy Grail for most dabbling fossil-hounds. But my own favorites were the brachiopods, smooth-shelled mollusks ranging in size roughly from nickels to half-dollars. Sheets of limestone pocked and cratered with the shards of brachiopods suggested close-ups of the moon's surface. But somehow these broken bivalves provided a pleasing continuity with the intact ones in the river below. Whether saltwater or freshwater has reflected the scud of cumulus clouds here, clams of one sort or another have burrowed in the silt and animals have come here to fish.

From the top of the bluff, the road dropped steeply and flared in a tight loop at the edge of an oblong clearing. This oval circumscribed a down-at-the-heels cabin, fallen from its glory days in the twenties and thirties, when Ray Pierson, a prominent Kansas politician, entertained his cronies there. Along with the key to the gate, there was another that opened the cabin door, but we preferred to set up our tent in the meadow.

Dad spent the first ten years of his childhood on the upper-middle reaches of the Neosho, the first four years in Burlington, and the next six upriver in Emporia. His family then moved away from the Neosho, settling in Topeka, but the river remained a steady presence in their lives. After doing graduate work in St. Louis and Ann Arbor, Dad began teaching sociology at the University of North Carolina. When a position opened up a few years later at the University of Nebraska, just two hundred miles north of the Neosho, he didn't hesitate. Not long after, his parents retired to their childhood home of Burlington, and Dad's trotlining career resumed in earnest. He and my older brother and I trotlined together each May until my brother and I reached adolescence and summer jobs proved ruinous to our schedules.

About that time, my brother and I went out for our junior high cross country team and heckled Dad to try running with us. Flaccid and 40 pounds overweight, he pulled on a pair of ankle-

high work boots and shambled doggedly around the cinder track at our school. The obvious suffix to these laps would have been a handful of aspirin, a long soak and a mutter of "never again." Instead, his obsessive zeal kicked in. This same feral energy had propelled him as a 17-year-old into the 1940s blues clubs of Kansas City and Topeka to hear Big Joe Turner and Hootie McShann. I once asked him, "Weren't you scared being the only white guy in those clubs?"

"No. They could see that I loved the blues."

Dad's metamorphosis into a runner seemed as unlikely as a delicate green lacewing blossoming from a plier-jawed ant lion, but within a year, he shed the 40 pounds and ran his first marathon. Running became one of the defining forces of his life. To my chagrin, it even checked his four-decade passion for fishing. But I soon had a car of my own and was free to fully indulge my lusts. And we still continued our annual pilgrimages to Minnesota to fish for bass, pike and walleye. For seven years, though, no Crocketts trotlined the Neosho. But when I was 22, Dad and I blocked out a week between the end of our classes and the beginning of my whitewater guiding season in Colorado. We had that year and one more.

Dad always commenced a week of trotlining with the gleeful release and anticipation of a fifth-grader on the last day of school before summer vacation. Beneath this, though, he also bore what struck me as a sense of gratitude to be dipping into something old and deep. Most of all, the river itself. Then all the plants and animals here because of the river (and the river here because of them). But also all the people who have been drawn here by the river.

The way that people and land shaped one another fascinated Dad, and he was naturally hungry to learn more about the Osage who had long dwelled beside the Neosho. Studying historical accounts, he was mystified to discover that while earlier people had clearly fished the river, no records existed of the Osage eating fish or regularly using canoes or other boats. He wrote: *I can only remark that in disdaining the Neosho river fishing, they missed out on one of life's great joys.*

While Dad found the whole sweep of history in the Neosho Valley back to oceanic times compelling, our family's relations with the place were always palpable to him. In the evenings, after we had run the lines and had dinner, we usually decided a little more fishing was in order. We would walk a faint path upriver from the meadow where we camped to Pierson's gravel bar. Threading through rank undergrowth beneath great columns of walnuts and shagbark hickories, we were sometimes caressed by bubbles of warmth remnants of the sublime, never-to-be-repeated afternoon not yet willing to

fade. More often, we would dip into a little depression and feel a stream of cool, moist air washing over the trail with the casual grace of a stray shaft of moonlight. Eventually, the trail dropped sharply to the gravel bar.

Settled on five-gallon buckets amid the limestone cobbles, our index fingers cradling taut line, alert for any faint thrumming, Dad and I would sit without speaking for long spells, listening to the night sounds of the river. In the absolute comfort of this quiet, he sometimes told stories about his own father and grandfather and their cousins and friends—our kin who had camped and fished along these banks for nearly a century. These narratives carried no whiff of nostalgia. Dad spoke about long-dead people as if he had just seen them a few weeks ago, delighting in the nuances of their personalities and the specific hues of a story.

The closest he ever came to sounding wistful was in describing a journey undertaken by my great-grandfather, John, and his brother, Jib. Set in either 1904 or 1905, this idyll could have sprung directly from Twain's imagination. The pair launched a boat on the Neosho near Burlington and drifted downstream some fifty miles. Guided purely by the river and their own cadences, they camped and set limblines as they went, selling or bartering fish in the river towns along the way. Eventually, they sold the boat and returned home by train.

I haven't caught a catfish since Dad died. There was no vow of abstinence. I was simply seduced by flyfishing for trout, a somewhat unlikely evolution from fishing with what can only be described as cord. In western Montana, where I live, there are no catfish. But Lewis and Clark reported catching "white catfish" (channel cats) in the Musselshell. They remain plentiful there, as well as in the Milk, Powder, Tongue and the other fabled cowboy rivers which drain the eastern half of the state. Even such hallowed trout waters as the Yellowstone and Missouri eventually slow

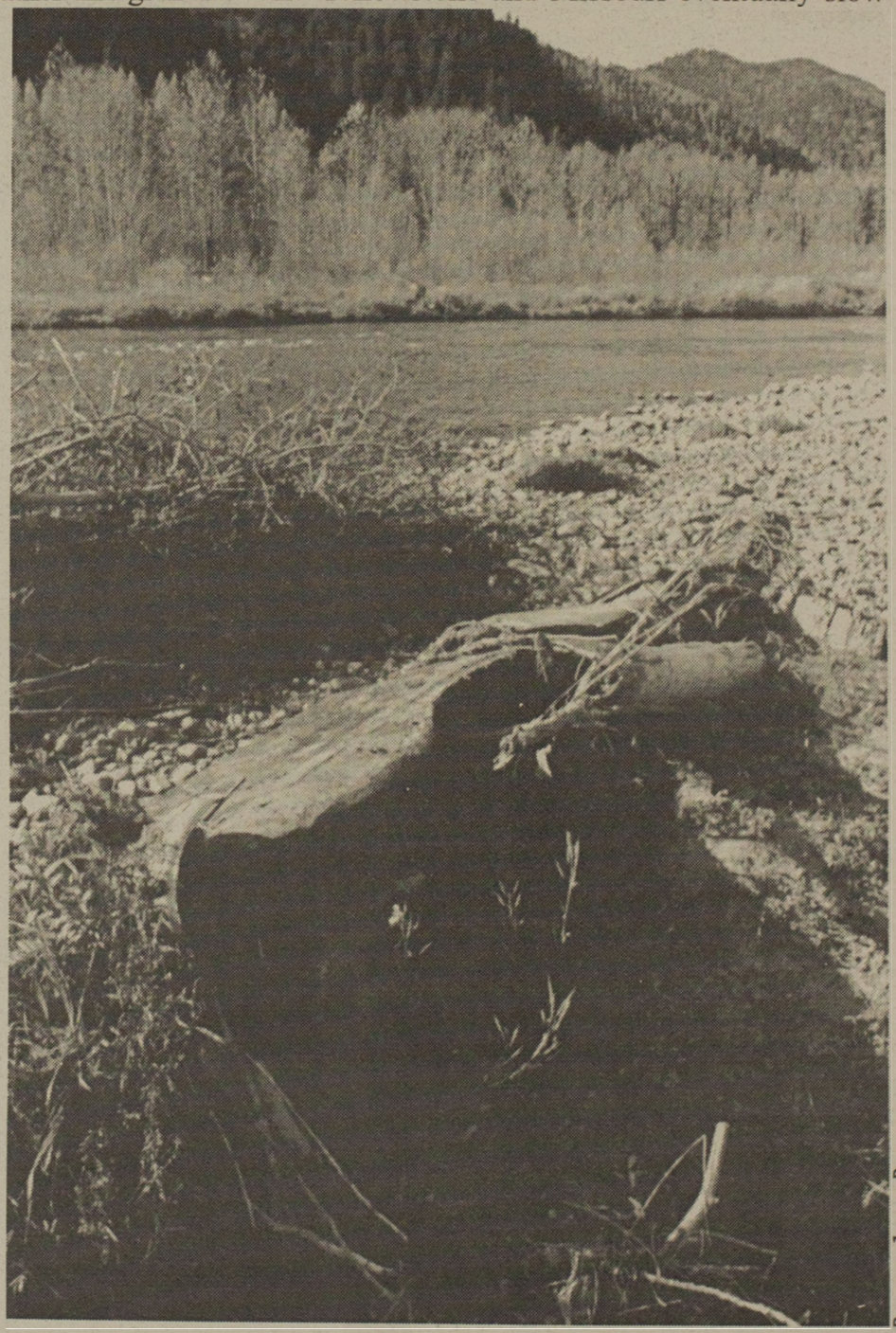


PHOTO BY JEREMY PUCKETT

and warm up, and trout give way to fish named after cats and paddles. It probably doesn't happen, but perhaps there is some marginal mixing zone in these rivers where it's possible to catch trout, catfish and paddlefish from the same run.

You could drift a #20 Griffith's Gnat, lob out a hunk of chicken liver and jerk a three-pronged grappling hook across the bottom in an effort to intersect the path of a migrating paddlefish. Which is not to look down upon those who heave the big snagging trebles again and again, hoping, like the rest of us, to feel themselves suddenly connected to a mysterious creature that will do everything in its power to remain a mystery. And certainly not to take anything away from paddlefish. They belong here. But somehow these Pleistocene relicts seem to have more in common with narwhals or ichthyosaurs or Minotaurs than with the cutthroat sipping midges in a long slick.

For the most part, I prefer the heads of rivers to their tails. I like the wild creeks that fan out like dendrites at the high ends of watersheds. Of course, I love the coiled power of the big rollicking rivers, too. All right. What I like is water that sings *trout*. I indulge in a more or less constant see-sawing between my appetite for unexplored water of every stripe so long as it holds spotted fish and my desire to fathom as many dimensions of a single lovely run as I can. To reach a stretch of river that holds catfish, I would have to drive for six hours past dozens of creeks and rivers where trout shift in cold currents. It hasn't happened yet.

Though my own preferences lie with trout and water the color of air, the Neosho still flows in my heart. Not only did I fall under the spell of fish and rivers and quietude there, I also caught fleeting glimpses of the intimacy which reveals the uniqueness in each sweep of river and fold of land. A few months before Dad died, he wrote: *Fishing the Neosho is unequivocally a birthright of the Crockett family. May you pass it on.* Well, I may not.

It has become increasingly clear that at the least, my wife and I need to return there and let our daughter trail her fingers in the river. But in all likelihood, I'll never run a trotline again in the Neosho or anywhere else. This doesn't mean that I don't honor the Neosho or the feelings my father and his father and grandfather held for it. The gifts they gave were the love of rivers. The love of fishing. The love of specific place. The love of sharing all these things with one another. Dad went on: *May these places touch your hearts as they have mine, and bring you pleasure and peace and the lasting companionship of loved ones, both alive and dead.*

It's late in the week on our last trotlining trip. Tomorrow morning we'll run the lines together, then dismantle them. Dad will go back to Nebraska (soon to confirm that he has lung cancer) and I'll head to Colorado once more to paddle whitewater. We have the boat pulled up on Pierson's gravel bar. Armed with sponges and scrub brushes, we're leisurely scouring as much elk-brown mud out of the boat as we can. We have our rods propped up on forked sticks. Out on the bottom of the riffle, a couple of large minnows flash seductively. The afternoon sun goes deep into our backs as we bend and crouch. Fritillaries, mourning cloaks and a red-spotted purple spangle the gunwales. Downstream comes the caterwaul of the siren.

Sure enough, the river soon begins to bulge. Presently, Dad spots a huge old tractor tire navigating the hole above us. It lumbers along mostly submerged like an indolent hippopotamus. When the tire meets the knee-deep riffle out from the bar, it hops up and gyrates on an undeviating course for 25 yards as if suddenly regaining its sense of purpose. Where the riffle slants away into deeper water, the tire doesn't lurch sideways in the manner of a breaching whale, just gradually sinks back down and resumes its former posture.

"Well," Dad says, "One last good roll."

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Reintroduction Enters Public Arena

by Meg Hahr

Before the arrival of Europeans to North America, up to 100,000 grizzly bears (*Ursus arctos horribilis*) roamed western North America from the Arctic to Mexico and from the Pacific Ocean to the Missouri River. As European settlers dispersed throughout the western landscape claiming it as their own, native plant, animal and human communities were dramatically altered.

The huge herds of bison, elk, deer and pronghorn that had historically occupied the western ranges and forests were decimated by European hunters and replaced with domestic cattle and sheep. Dams were built, cutting off the return of salmon from the ocean to up-stream spawning grounds. Biologists argue that with much of grizzly bear food base destroyed by European settlers, bears turned to domestic livestock. Because most ranchers would not tolerate any livestock losses to grizzlies, the bear had to go.

The effort to exterminate the grizzly bear in the western United States was quick and nearly effective. It is estimated that by 1949 only 1000 grizzly bears remained in the contiguous U.S. Although conservationists like Aldo Leopold were concerned that the bear would disappear from the West, the general public was slow to see the need for the preservation of species like the grizzly bear.

With the passage of the Endangered Species Act (ESA) in 1973, conservationists finally had a legal tool with which to ensure the protection of species and their habitat. The grizzly bear was listed as a "threatened" species in the lower 48 states in 1975. Grizzly bear experts said there were probably less than 1000 grizzlies in the lower 48 at the time of listing—an estimate that remains consistent today. These remaining grizzlies comprise five small, isolated populations-the Northern Continental Divide (Glacier/Bob Marshall) in Montana; the Greater Yellowstone in Idaho, Montana, and Wyoming; the Selkirks in Idaho and Washington; the North Cascades in Washington; and the Cabinet/Yaak in Montana and Idaho.

As required by the ESA, a recovery plan describing actions needed for the protection and recovery of the species was adopted by the United States Fish and Wildlife Service (FWS) in 1982. The recovery plan was revised and released by the Service in 1993. A coalition of environmental groups challenged the recovery plan, arguing that it violated the ESA by not adequately delineating or protecting the species' habitat and by failing to identify "objective, measurable criteria" to assess the species' status.

In 1995, a federal judge ruled that the Service needed to address the environmentalists' concerns by providing more information on habitat degradation, disease, reliance on Canada, genetic isolation and threats from livestock. They eventually provided the necessary information to the judge, and the suit was settled.

The Grizzly Bear Recovery Plan also discussed grizzly recovery in the Bitterroot ecosystem of central Idaho and western Montana and in the San Juan Mountains of Colorado. In both places, there have been numerous unconfirmed reports of grizzly bears, but it is believed that no grizzly bears exist in either area. At this time, the Service began a scoping process to develop an Environmental Impact Statement (EIS) on grizzly bear recovery in the Bitterroot. Public comments regarding grizzly recovery in the area were solicited. Two Missoula-based conservationists, Hank Fischer of Defenders of Wildlife and Tom France of the National Wildlife Federation, decided to give the process a jumpstart. Using their combined experience from 15 years of working to reestablish wolves in Yellowstone National Park, France and Fischer initiated a dialogue with timber industry representatives on possible ways to recover the Bitterroot grizzlies.

France and Fischer eventually formed an unusual coalition with the Resource Organization on Timber Supply (ROOTS), which represents paper mill and sawmill workers, and the Intermountain Forest Industry Association, which represents timber companies in the northern Rockies. After nearly two years of discussion, the coalition devised a plan for grizzly bear reintroduction and presented it to the Service.

The main goal of the plan is to restore grizzlies in the Bitterroot while also addressing local concerns. The defining characteristic of the coalition's proposal is the Citizen Management Committee which is comprised of 15 people recommended by the governors of Montana and Idaho and appointed by the Secretary of the Interior. Under the plan, the Committee would be given full management authority in lieu of the Service.

The second critical component of this plan is the "experimental, nonessential population" designation. Under an amendment to the ESA, this designation can be used to provide more flexibility in the management of the species. A minimum of 25 grizzlies would be released over five years, and the recovery area would include both the Selway-Bitterroot Wilderness and the Frank Church-River of No Return Wilderness, an area of approximately 5785 square miles.

At the same time that Fischer, France and the timber representatives submitted their reintroduction plan to the Service, other local environmental groups were working on a plan of their own. In 1996, Mike Bader of the Alliance for the Wild Rockies and Tim Bechtold of The Ecology Center completed their *Conservation Biology Alternative* (CBA) for grizzly reintroduction.

The CBA calls for a considerably larger recovery zone, comprising approximately 21,645 square miles, including a linkage zone between the Salmon-Selway Ecosystem and the Cabinet-Yaak Ecosystem. The reintroduced bears' status under the ESA would be maintained, and the bears would be managed by a ten-member scientific committee appointed by the Secretary of the Interior in cooperation with the National Academy of Sciences.

The recovery zone would extend out of the two wilderness areas and would require the removal of roads to meet road density standards for grizzlies. If scientists can locate a non-threatened source population, a minimum of 25 grizzlies over five years would be released into the Salmon-Selway ecosystem.

A Draft EIS was released last summer in which the Service described the different alternatives for reintroduction. In addition to the ROOTS plan (Alternative 1) and the CBA (Alternative 4), the Draft EIS includes two additional alternatives calling for no release of grizzly bears.

Natural Recovery (Alternative 2) allows for

SKETCH BY JACK KLEMPAY

recovery of grizzly bears in the ecosystem through natural recolonization. Alternative 3 calls for the prevention of grizzly presence in the Bitterroot Ecosystem.

The Service solicited public comment on the Draft EIS in the form of letters and testimony. Public hearings conducted by the Service were held throughout western Montana and central Idaho in early October. Meetings in some of the more rural towns like Hamilton, Montana, and Salmon, Idaho, were well attended and contentious. Very few people spoke out in support of the ROOTS plan, Alternative 1. The majority of the citizens either opposed the reintroduction of grizzlies entirely or supported reintroduction under the CBA, Alternative 4.

At the hearings, many local residents expressed not only a fear of bears, but also an extreme aversion to the federal regulations associated with endangered species protection. According to Michael Coffman, director of Sovereignty International, "the federal plan to reintroduce grizzlies is fraught with implications for private property rights, economic development, the security of livestock and the physical safety of residents in the affected area." Coffman asserts that the reintroduction plan is part of a bigger conspiracy between radical environmentalists, the federal government and the United Nations to take over private property in the name of biodiversity protection.

Others expressed sentiments similar to that of native Montanan Bud Moore, author of *The Lochsa Story*, who feels that "grizzlies are needed to make the ecosystem whole again." According to Moore, "If grizzlies are restored in the Lochsa, then all the towns like Missoula could reclaim their reputations as exciting entryways to the wilderness."

Even among those who can agree that reintroduction is necessary to grizzly bear recovery in the lower 48, there is significant debate as to how it should happen. Fischer and France are banking on the support they have received from the timber industry and Gov. Rocicot of Montana to override overwhelming opposition to the plan from Gov. Batt in Idaho, local citizens and federal and state legislators. This political support would not be possible, the timber industry coalition believes, without the creation of the Citizen Management Committee and the use of the experimental, nonessential designation. Yet, it is precisely this "political strategy" that has angered and alienated so many environmental groups.

Environmentalists like Mike Bader of the Alliance for the Wild Rockies, Louisa Willcox of Wild Forever and Doug Honnold of Earth Justice Legal Defense Fund criticize the coalition's plan because it does not adequately protect the habitat of the grizzly bear. Without enough habitat–the right kind of habitat–and linkage zones connecting habitats, they believe that grizzly populations cannot persist in the lower 48. These environmentalists and over a dozen grizzly bear biologists believe that only Alternative 4 meets the requirements for long term grizzly survival.

The timber industry coalition and the Service assert that their plan, Alternative 1, both protects adequate habitat and provides a mechanism to handle local concerns. Dr. Chris Servheen, Grizzly Bear Recovery Coordinator, has identified human-caused mortality as the greatest threat to grizzlies in the lower 48. According to Servheen, "Unless we can get local citizens to support grizzly bear recovery plans, those conservation efforts will fail." Servheen and the timber industry coalition believe that although the CBA is science-based, it could not be successfully implemented because it does not adequately address political and social realities in the affected area.

Since a significant number of local citizens and political leaders oppose Alternative 1, the self-described collaborative alternative, no one is betting that a reintroduction of grizzlies in the Bitterroot will happen anytime soon. "With that kind of political opposition, who can say for sure," says France. The official comment period on the draft EIS ends on December 1st. After public comment is reviewed, the FWS will issue a final EIS and a Record of Decision.

Weed Removal Sprouts Debate

by Sydney Cook

After over a year of debate and public comment, the controversy surrounding weeds on Mount Sentinel remains unresolved. In the spring of 1996, Missoula citizens rejected the initial Mount Sentinel weed control plan, which relied heavily on herbicides and included helicopter spraying of the mountain with the pesticide Tordon. Research indicates that there are links between pesticides and increased risk of cancer, birth defects and reproductive problems in humans and wildlife.

Under pressure from environmental and citizen groups to come up with an acceptable alternative, University of Montana President George Dennison allocated funds for graduate students Allison Handler and Chris Woodall to rework the original plan.

Handler and Woodall's alternative, Grasslands Restoration and Weed Management Plan for Mount Sentinel, minimizes herbicide use and emphasizes alternatives such as sheep and goat grazing, biological and mechanical controls and revegetation with native species. The plan also eliminates spraying below the "M" but will still allow spraying above it.

The Mount Sentinel management committee will make its recommendation for a final plan to the Integrated Pest Management Committee. However, it is unlikely the Management Committee will support an alternative minimizing pesticides.

The committee consists primarily of people supportive of the original herbicide-dependent plan, and the majority of the members are predisposed to herbicide and helicopter spraying.

In addition, the committee proposes adding the extremely toxic herbicide 2,4-D to the mix of chemicals used on the mountain, despite the fact that 2,4-D has been banned from use on the entire University of Montana campus for several years.

The committee is leaning toward implementing a plan which calls for a two-year moratorium on helicopter spraying and 2,4-D. After the initial two year period, the committee will reconsider the decision. They will present the completed plan for public comment.

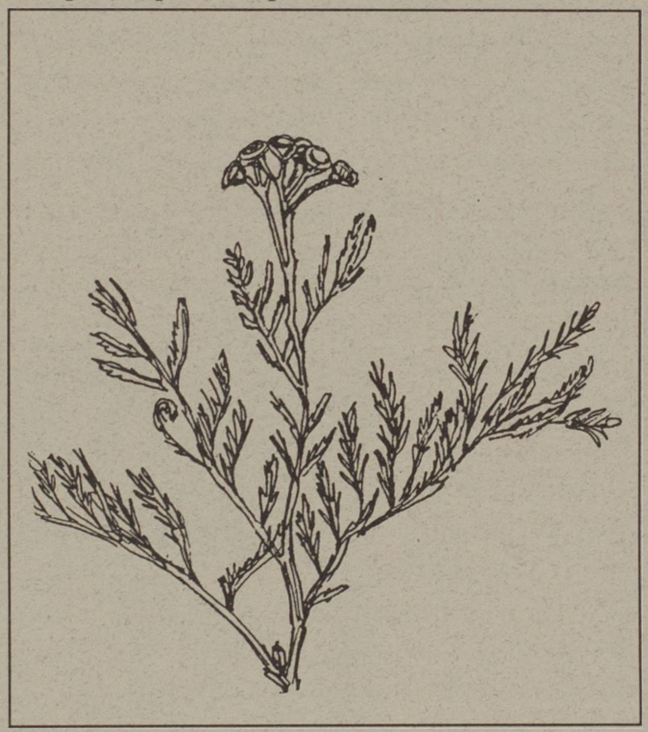

PHOTO BY SARA HYMAN

Cove/Mallard Sales Face Dissension

by Billy Stern

Interest in further Cove/Mallard timber sales to Shearer Lumber Company resurged this summer after Idaho Federal District Judge Boyle denied relief to the Idaho Sporting Congress' suit against the company. The suit claimed that the sales violated NEPA, the Clean Water Act, and the Endangered Species Act.

Shearer has already logged two of the nine parcels included in the Cove/Mallard sale, which is located in the Nez Perce National Forest of central Idaho. They have begun logging a third parcel and are now attempting purchase rights to the remaining six parcels.

Although an appeal on the decision will be heard by the Ninth Circuit in January of 1998, the court's refusal to put an injunction on the logging led to months of protests.

Five demonstrations at the site of the sale (including a 74-day blockade on Jack Road, which leads into the sale area) led to 11 arrests. Following the removal of the blockade, regional student groups began to protest. During protests that bookended a nine-day vigil, two students were arrested outside of the Boise Federal Building, and nine were cited outside of the Forest Service Region 1 Headquarters in Missoula.

Despite these efforts, loggers completed more than twenty clearcuts near Noble Creek and are now working rapidly to finish more than 15 cuts planned near Jack Creek before the fall weather makes the roads impassable.

Slowed by protests and lawsuits, the entire sale has passed the scheduled completion date. If Shearer finishes the current work on Jack Road, the company will have completed only one quarter of the total cuts planned for the area and impacted three drainages. Further cuts would impact six other drainages near the migration corridor of two wilderness areas.

Because of the October 17 listing of Steelhead under the Endangered Species Act, the Idaho Sporting Congress has filed a second suit, which is currently in a 60-day waiting period. They are requesting that the Forest Service stop all logging in the Nez Perce National Forest until companies initiate consultation with the National Marine Fisheries Service over the status and habitat needs of the Steelhead.

The court date for this second suit will be announced after the waiting period.

PHOTO BY LESLIE BERG

Changing of the Guard

by Sydney Cook

After three years, the guard is changing at the Forest Service at Region 1. Hal Salwasser stepped down as Regional Forester to become Station Director for the Pacific Southwest Forest and Range Experiment Station. Salwasser's replacement, Dale Bosworth, was the Regional Forester in the Intermountain Region before the most recent reshuffling.

Bosworth steadily worked his way up the Forest Service ladder. Before he came to Missoula, he began his career as a forester in the Idaho Panhandle National Forest and remained in the Northern Region for almost 20 years. He joined Region 4 as the Assistant Director of Lands before his appointment to Forest Supervisor of Utah's Wasatch-Cache National Forest. After a stint in D.C., Bosworth returned to the Pacific Southwest as the Deputy Regional Forester. In 1994, he was promoted to Regional Forester in the Intermountain Region where he remained until his present assignment in the Northern Region.

Bosworth arrived in Missoula with a record that is not easily categorized. Neither the timber industry nor the environmental community can claim that he has definitively endorsed one side over another in the public lands tug-of-war. Dick Carter of the Uinta's Preservation Council, a conservation organization in Utah, articulates Bosworth's incongruous career: "I'm not weeping that Bosworth is leaving; however, whoever takes his place won't be as progressive."

Environmentalists extolled Bosworth's record as Forest Supervisor in the Wasatch-Cache for his commitment to public involvement and responsible land stewardship. Carter described Bosworth as a "remarkably courageous supervisor." He steered the forest in a new direction by eliminating timber harvesting in roadless areas and slashing the timber program in half. The environmental community also praised Bosworth's criticism of a Forest Service decision to allow aerial gunning in the newly established Mt. Naomi Wilderness Area. The Forest Service eventually overturned the decision after Bosworth insisted that the agency first conduct an environmental impact statement.

According to Cindy Deacon Williams of the Pacific Rivers Council, Bosworth continued to demonstrate his "conservation credentials" as the Intermountain Regional Forester by supporting INFISH and PACFISH interim directives—mandates that included some of the most comprehensive and protective fisheries guidelines to date. When other Regional Foresters balked, Bosworth pressed for aggressive implementation and accountability of the directives throughout his region.

Environmentalists criticized Bosworth's support of the Thunderbolt Salvage Sale on the Boise and Payette National Forests. His decision ended a decade-long moratorium on timber harvesting in an area heavily impacted by road failures. Don Smith of Idaho's Alliance for the Wild Rockies interpreted this as Bosworth's inability or unwillingness to reign in the "renegade" Boise and Payette National Forests. Williams echoes his sentiments: "Much of the scientific argument used by the Boise National Forest to support the decision was based on unfounded scientific theory."

On the other hand, Jim Riley, a representative from the Intermountain Forest Industries Association, commended Bosworth for "keeping his eye on the forest by seeing beyond the rhetoric and doing what was best for soils, forest regeneration and water quality."

When asked what he thought about the Thunderbolt Savage Sale debate, Bosworth stated "The land was better because of the sale." Bosworth added, however, that his credibility with the environmental community suffered. Because he values his relationship with environmen-

mentalists, the controversy and mistrust was unfortunate.

The criticism does not stop at the Thuderbolt debate. It also seemed to Carter that Bosworth's vision as Forest Supervisor faded when he became Regional Forester. Bosworth's decisions as Regional Forester reflected a bureaucrat "hesitant to deal with any sector of the public except for congressional people," Carter explained. After his progressive management of the Wasatch-Cache, Bosworth's reluctance to "engage the land ethic and do the right thing for wilderness" was seen as a betrayal to environmentalists like Carter, who had high hopes for the up-and-coming visionary.

How Bosworth's reassignment will affect the future of public lands in the Northern Region remains unclear. Kathy Steward of Idaho's Northern Rockies Coalition is optimistic that Bosworth represents "new thinking in the Forest Service" and comes to Montana on the wave of reform that is quietly percolating in some corners of the Forest Service.

However, Jim Riley does not expect much change in the way the region will be managed with Bosworth in charge—and neither do some members of the environmental community. According to Don Smith, "The driving forces behind the agency are bigger than one individual. There's only so much he can do. The job makes him more than he makes the job. We would be naive to expect too much."

PHOTO BY JEREMY PUCKETT

Managing the Columbia Basin

by Katherine Deuel

The Interior Columbia Basin Ecosystem Management Project (ICBEMP) is arguably the most ambitious public land management effort in the history of the United States. The purpose of the project is to reconfigure management guidelines by amending the current management plans for almost all of the United States Forest Service (USFS) and Bureau of Land Management's (BLM) land in the northwest—72 million acres of public domain.

Prompted by contentions over salmon and bull trout, owls and old growth and all the difficult resource management issues that attend managing public land, federal agencies are beginning to shift their focus from small, site-specific projects to larger, ecosystem-based proposals. The Interior Columbia Basin project, which encompasses one quarter of all National Forest lands, is not only the largest and most complex of these ecosystem-based proposals, but also could become a model for future public lands projects. While the project excludes small sections of the Columbia Basin, it does include some parts of the Klamath and Great Basins.

The federal government has spent 35 million dollars on the project to date. Most of that money was spent funding the Science Integration Team, a diverse group of scientists who documented the social and ecological status of the basin and clarified the major issues that the management plan should address. The plan will eventually determine standards and guidelines for management in the ecosystem, but will not designate specific projects.

Their findings, published as the *Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin*, were used by an interdisciplinary team of BLM and USFS personnel to develop seven alternative management proposals. The management alternatives were then offered for review by BLM and USFS officials and the public in two separate but related documents: the *Interior* and *Eastside Columbia Basin Draft Environmental Impact Statement*.

The agency officials decided that alternative 4 would serve as the best approach to management of the ecosystem. While their decision is not set it stone, it seems unlikely that other alternatives will receive significant consideration, regardless of public input. The preferred alternative doubles current logging levels in the Columbia basin.

Conservationists, scientists and tribal groups argue that Alternative 4 does not offer a wise, sustainable or ecologically sound approach to management. They believe it is not an appropriate response to the team's findings.

Typically, increased logging means increased road construction or use. The science team found that roadless and designated wilderness areas have the highest ecological integrity in the basin, and many of the remaining roadless areas are critical strongholds for native fisheries. The scientists highlighted the direct correlation between increasing road density and declining aquatic habitat.

Tim Coleman, executive director of the Kettle Range Conservation Group, explains the significance of this discrepancy: "At the center of this disconnection between what science tells us and how the lands are managed is the overt implication that the earth's ecosystems cannot maintain themselves without the intervention of chain saw and bulldozer."

The public comment period is open until February 6. Most likely, these comments will help to modify Alternative 4. It is also possible that the funding for this project will be cut because it remains so contentious.

If the agencies move along with the project as planned, they will select and/or modify one alternative and publish it in a final EIS and Record of Decision.

Manu

by Christine Paige

Dusk is falling quickly, and I am writing in the library: a bird's-nest of a room in the old casa overlooking the "cocha," a curving, oxbow lake set like a comma in the rainforest. The cocha's pea-green water turns to silver in the last light and a glow still hangs in the western sky. Moths hurl themselves against the screen, beating a percussive rhythm to the dance of crazy shadows that leap from the candlelight and sweep away into the tangible dark. The forest swells with voices in the dusk: a laughing falcon calls in the distance, "wa-kawai, wa-kawai," and the trees overhead buzz and sing with insects. Here in the candle-glow I am wrapped in what has become home for a time, the familiar gathered close-in as darkness descends and the warm breath of the forest presses against my small pool of light. Out in the seething busy-ness of the night lays a landscape with layer on layer of secrets.

For four months, between the intense heat of the equatorial dry season and the onset of the rains, I have been in the company of a group of research scientists at a biological station in Manu National Park. Perched in the farthest reaches of the Amazon Basin, the entire watershed of the Manu River has been designated a national park and biosphere reserve: twice the area of Yellowstone and nearly the size of New Jersey. The Manu's headwaters begin in the Peruvian Andes and over 150 miles the river falls 12,000 feet from the dry Andean highlands through cloud forest and into the bowel of the Amazon. At Boca Manu, the "mouth of the Manu," the river meets the Río Alto Madre de Dios, swelling the belly of the "River of the Mother of God." Once captured by the swift Alto Madre, then the Madeira, and at last the great Amazon itself, the Manu's waters reach the Atlantic Ocean almost two thousand air miles from their origin.

I took a hiatus from graduate school to come to the heart of the jungle and work for a respected ornithologist, Sandra, and help with her study of the love-life of manakins—finch-sized songbirds that live in the forest understory. In our time here, our team, including Sandra and four assistants (myself; David, another American; and Pepe and Guisella from Lima) collected hours of observations on manakin courtship dances, parceling out flutters and flits, songs and furious chases into categorical data in an effort to piece together the story of some obscure forest birds in an isolated corner of the world.

We have been asking questions of the jungle. I came charged with stories from books, biology texts, and classrooms, ready for an intensive immersion in tropical ecology. I wanted to see for myself leaf-cutter ants carrying their green sails, and fig trees that strangle the host trees they use for support on their climb to the sunlit canopy. I wanted to see how the brilliant colors of parrots can melt like camouflage in the jungle's light. I came here to study an ecosystem, to bring it from abstraction into something real, something I could hold onto, something I might understand. But the answers I found in the forests of Manu, if they are answers, don't fit easily into data books.

The trip into Manu gave concrete definition to our isolation. With our team, ten other Peruvian students bound for the research station and a mountain of supplies to haul from Cuzco, we relied on a one-ton lorry for the trip from the Andes into the Amazon. Since the one-lane "highway" allows traffic to run only east or west on alternate days, we hoped to time our departure for the next eastbound day, but gas was scarce in the mountain city. Government strikes gummed up the transport of goods and Petrol Peru was either out of gas or just not selling it. For three days our driver haunted the petrol distributors while we scoured the mar-

kets for last-minute supplies: rubber boots, a crate of eggs, rounds of cheese, cases of saltine crackers and condensed milk, boxes of rum. With a wild nest of dark hair corralled under her bandana, Sandra commanded logistics like a bilingual hurricane, her mind racing ahead of every moment, and her assistants struggling to keep up. Usually lively and warm, Sandra occasionally revealed a hard edge I put down to exasperation with those of us with slower wits. Four months of provisions for jungle research piled up in the hotel lobby.

By the morning of our departure, we had two of the three barrels of petrol we needed for the trip, and our driver made the rounds to every depot a last time as we waited, perched on the gear, slipping into ennui as morning warmed to midday. At three p.m., the driver returned triumphant and the three-day journey to Manu by lorry and canoe was underway. We loaded gear and made our seats on top of backpacks, potato sacks, tires and crates in the bed of the truck. The truck's high plywood sides cut out all view except sky and mountaintops. Sweethearts Pepe and Guisella huddled on the spare tires and David grabbed a spot on the fuel barrels for the view, beard jutting into the wind as we rolled out of town. Jouncing around on the gear, sailing into the air over bumps, we clung to our perches as we flung from side to side. The trip over the Andes became a 24-hour ride in a Maytag machine.

I watched the sky as the truck wound up the track into the mountains, and the soft rose of dusk bathing dry and treeless hills slowly gave way to an inky night. A billion stars faintly lit the hulking shapes of mountains looming about us like slumbering beasts. The track was just wide enough for the truck to pass: a sheer mountainside above us, an abrupt plummet below to rock and scree, no shoulders. No room for error and all our trust in the man at the wheel. As we climbed passes at 11,000 feet, and again at 15,000 feet, the air became cleaner, colder. Our headlights pierced the night, and far ahead other lights blinked like lightning bugs. Somehow I dozed, bundled in sweater and sleeping bag, my head banging against the boards, stiffness creeping into my back and limbs. I slept dreamlessly, drinking in the cold, dry air.

As we dropped from cloud forest into lowland jungle, we began to pass more settlements, each cluster of houses surrounded by large clearings that lay barren and scorched. Leaving the forest shadows, we were suddenly exposed to a hazy burning sky. On denuded hillsides the skeletons of limbless trees scraped the sky. These plots were burned, grazed, briefly cultivated, then abandoned to overgrow again into a low, green tangle. We advanced through these landscapes as though through a war-zone, pulling along with us the stares of children in tattered t-shirts, of dogs scrounging for scraps, of tired-looking men crouched on stoops. Our talk fell away as we gazed back at cheerless faces and the embattled landscape until, abruptly, we plunged again into the diffused light of the forest.

These communities are the outposts of a wave of immigrants from the coast searching for land and a living. Most of the settlers are of Spanish ancestry, and this wave of newcomers echoes the tides of European-descended people who claimed the North American West for their own. Many Peruvians make a clear class distinction between Indian and Spanish heritage, although such lines don't always follow divisions of wealth. Nonetheless, the settlers bring a different culture to the jungle. They clear away the tangle of rainforest, sell the timber and raise cattle or crops for the few years before the soil is exhausted and they must clear another tract of forest. The communities have the raw, new, impermanent feel of all boom towns scratched out of the wilds.

Just as dusk came on, we met the end of the road at Shintuya, a single shack that serves as a port for the Río Alto Madre de Dios, and we crawled from the truck bed, glad of the end of the seismic ride. After a night of sleep on solid ground, we took to the river for the remainder of the trip and at last put most of civilization behind us. A gathering of boatmen and villagers discussed the scene as we loaded gear, and stories of upsets and disasters christened our launch.

The boats of these rivers are 30- to 35-foot plank-sided canoes, the barges of the upper Amazon, designed for the shoals and quick currents of the Madre de Dios. Most are powered by a small, makeshift, and fuming inboard locally called a "peque-peque," a sobriquet descriptive of the motor's sputtering voice. Lately, 55 horsepower Evinrude outboards have become popular, and fortunately such a Porsche of the river powered the boat we hired.

From the river the jungle appeared deceptively one-dimensional. A humid haze flattened perspective, and the horizon was reduced to a corridor of trees, the river sliding along in broad graceful turns across a continent. None of my textbook stories had prepared me for the infestation of life: the density of plants climbing on one another, the multitudes of birds flashing through the green, the voices seething in the canopy, the perpetual insect thrum and flutter. To be immersed in such lushness is deceiving: it is life so all-encompassing, so overwhelming, it seems it will grow and regrow forever. The scarred lands we passed on the road soon drifted into half-memory.

The boat glided on through a tunnel of young rainforest that is regularly flooded and renewed as the Alto Madre meanders across the alluvial plain. There were no hills or uplands to define a horizon. Talk fell away as we were pulled along through the long hours and heat, minds absorbed by looking, eyes drawn to each new river bend. Snowy egrets pumped broad, white wings upriver, trailing black legs and bright yellow feet. Lime-green parrots and oropendulas, large oriole-like birds with impossibly yellow tails, started up at our passing. Swallows darted and swirled and the air was swollen with the sounds of the jungle talking to itself. Pepe pointed out the whistling of tinamous, plump brown birds of the forest floor. Black vultures circled the hazy sky and skimmers peeled over the river hunting fish, bills ripping the surface of the water as they flew.

Every so often we passed an encampment on the river bank: a thatched hut, a tarp, a shack of boards and bamboo, looking not so much like outposts of civilization as bits of flotsam washed ashore. These were not the Amazon's native people, but more settlers escaping cities and towns, pulled over the Andes by hope to farm, raise cattle, log mahogany, placer-mine for gold, hunt or poach for skins and feathers. Taking a toehold, they chip away at the jungle, beating back the wilds, and every dwelling sits amidst a pile of debris. It seemed to me promise had fled these places, the people reduced to endurance. Not finding a generous life in the rainforest, they seem to live an existence that chews away at the jungle's green flesh. We waved at sober children as we drifted by.

At Boca Manu our boats left behind the turbulent Alto Madre, turning upstream onto the languid muddy waters of the Manu River. We passed the last encampments fringing the national park and continued into the park's heart, with each mile the wildlife becoming wilder and more diverse. The Manu River is marked by sandy beaches opposite eroding cutbanks, and the murky water hides half-buried logs and sweepers that can easily capsize a weary pilot. We threaded our way through logjams, watching the beaches for jabirus, great stork-like birds, and capybara, 120-pound rodents often called the hippos of the Amazon. Four howler monkeys out for a stroll on the river bank watched us pass. Flights of

macaws started from the trees, turning in synchronized duos and quartets like brilliant Chinese kites, blue and gold, long tails held stiffly behind.

At the 105th beach from the confluence, we put ashore and were greeted by a gaggle of Anglo and Latin biologists, decked in muddy khakis and T-shirts worn like tattered national flags, welcoming us to Estación Biológica Cocha Cashu.

Photo by Janie Chodosh

As you step from the river into the forest interior, the world expands into a spacious gallery of leafy detail. Great fin-buttressed trees soar through the cathedral ceiling of leaves, their crowns breaking into sunlight two hundred feet above. High in the upper canopy, most of the business of the forest carries on, a clamor of activity, unseen. Within the forest, you float in a green and aquamarine ocean, as though diving on a magnificent reef. At the forest floor, brilliant butterflies patter by and clusters of ratchety-clacking locusts start up as you pass, with translucent wings shimmering cobalt-blue.

The research station, a ten-minute walk from the river, is three small, thatch-roofed buildings, framed of mahogany timbers, walled by mosquito screen, sitting on stilts three feet off the ground. One is the "old casa" that once served as an office and now houses our gear and a library of moldy paperbacks, Dante to Dick Francis, left behind by each year's population of scientists. The second building is the kitchen, dining area and pantry prowled by four-inch roaches, the denizens of the rafters and dark corners. The third and newest building is the office, with individual work spaces for project leaders and a scientific library that becomes the scene of late night bridge games. This last building is wired to a small solar panel to power laptop computers. Despite attempts at housecleaning, there are filmy, clumpy cobwebs clinging to nearly everything, and mildew invades every bit of paper, leather and cotton.

We have slept in tents scattered in small clearings along the trails, tarps strung overhead to keep off driving rains and a perpetual hail of leaves and insects. A web-like network of trails, "trochas," allows access to about two square miles of forest surrounding the station trails that must be cleared each season from treefall and overgrowth. For four months my world has been reduced to this small universe, its boundaries defined by the trail system, by the distance I can walk in an hour or so to our farthest-flung study sites.

This season, 30 biologists from North America, Peru, Brazil and Europe made Cocha Cashu home. The director, an eminent Princeton ecologist, established the station years ago and effectively lobbied for the park's protection as a global biosphere reserve. Half a dozen senior scientists, graduate students from Princeton University, and Peruvian students from the university in Lima conducted studies of animal behavior and the forest's ecology. Brought together by the culture of science and a curiosity for the unknown, this isolated tribe has been trying to tease apart the lives of caciques, ants, tamarins, lizards, squirrel monkeys, macaws, frogs, toucans, currasows, turtles and caiman. Some examined the structure of the canopy, some the distribution of dozens of species of palms. In a few intense months, we hoped to collect enough of the right measurements and observations to understand one small piece of the jungle puzzle,

and eventually fit that piece to existing, or maybe new, ideas of how the tropical forest works.

There was an intense focus on the work to be done, but also a search for diversions. Every night a gabble of "Spanglish" ebbed and flowed around the dinner table, buoying debates in ecology or news from home. A sort of social order fell out. The Peruvian and Princeton students tended to each bunch together out of common language and common history, but they are all, without exception, hungry minds. At times the Princeton students vied with one another, a competitive edge to their discussions, and I would see them lined up at the director's office for his advice as though they had transplanted the hustle of the university science department to the jungle. The director seemed to have a softer heart for the Peruvians, allowing them the bulk of his time and attention.

Come evening, there were cutthroat bridge games convened in the library, and the senior scientists congregated in the director's office to sip rum and knock around half-formed theories.

It was evident early on that I fell somewhere between the cracks as an unestablished biologist from out West somewhere: no Ivy League credentials; older than the students, but younger than the senior researchers; and unable to play bridge. I was a babe in the woods with tropical ecology and struggled with survival Spanish. I felt something like a gecko clinging to the mosquito screen, watching the goings-on. Come nightfall, I usually drifted up to the library to practice Spanish conjugations or write letters on a wilting tablet in the candlelight.

But once into the manakin research, I was quickly caught up in a routine that kept me in the field from before first light to dusk. Although there were 30 of us, we were dispersed throughout the forest through the day, usually alone. Each of us seemed desperate to grasp onto something here in our brief visit, to claim something of this forest, and we brought back tales from our day's sightings of emperor tamarins, ocelot tracks, a rainbow boa, like prizes to be compared and admired over dinner under the harsh light of the gas lanterns.

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The lake for which the station is named was our watering hole, our bathing place, and the central focus of life at the research station. "Cocha" is Quechuan for oxbow lake, and this one is a remnant meander of the Manu River. Shaped like a cashew nut (hence "Cocha Cashu"), it curves away from the station. The water is grass-green and so turbid it's impossible to see through a bottle filled with it, and yet it tastes clean. We pumped bucketful after bucketful up from the lake for cooking and washing, and sunny days saw yards of clotheslines full and sagging, crowding the station's small clearing.

We washed away each day's sweat and bug bites with a swim in the cocha, occasionally brushed by platter-sized turtles. The lake is also inhabited by six-foot crocodiles and small piranhas, with which we seemed to develop a delicate truce. The piranhas only bite at fingers splashing the very surface of the water and avoid anything large and submerged. The crocs kept their distance, allowing us our small territory defined by two fallen logs near the old casa, but they charged any swimmer that betrayed the

boundary. Although my tent site was just a few feet from shore, it was fenced off by a dense wall of vegetation at the water's edge, and each evening I listened to the caiman slipping from muddy perches and sploshing into the water a stone's throw away.

Over these months, spending my days in the heart and half-light of the forest interior, the cocha became my window to the sky. It gave me breathing room. In the evenings, I paddled out in a dugout 25 feet long and low to the water—not built for speed, but it handled well from the stern with a broad-bladed paddle. I'm told this was an old Machuguenga Indian canoe, and the Indians will fish, standing in the bow with a longbow and a light spear-like arrow the length of a man. Somehow a swirl or a bubble tells them where to aim in the opaque water, when to release a calculation based on practice and an inheritance of generations.

The jungle breathes its weather. The humidity builds over many days until towering cumulus clouds begin to trade across the sky, and when the air has become saturated, the sky finally wrings itself of all its moisture, releasing its gift of rain with wild, hurling winds back to the forest. Great tympany rumbles of thunder roll over the forest, low and deep, as though from the depths of the earth itself. The wind wheels in prolonged gusts, cracking limbs and hurling trees to the forest floor. The torrent pours down so relentlessly that two layers of rain-gear would do nothing to keep me dry. Then, as the storm passes, the forest is eerily quiet, with only the sounds of water dripping, running, and cascading through the leaves, tinkling like chimes. On the days after these great storms, the sky is washed clean and intensely blue, the light golden. I drift out onto the cocha again and lay back, gazing up into the clear atmosphere: it stopped my breath, and I felt the space and peace of being home under my own sky again.

In the dark before dawn, I woke to the booms of howler monkeys. The territorial males announced their turf by roaring to one another across the canopy. From a distance the crescendo of howls was like wind rushing and gusting through a narrow canyon; close overhead, you hear each guttural note, raspy and asthmatic. The howlers were my alarm, and I rolled out of my clammy sheet, checked for scorpions in my shoes with my headlamp, dressed and walked the trail to the kitchen. Breakfast was last night's beans and rice or saltine crackers and margarine.

Starting out on the trail in the gloom of predawn, I could never shake my jumpiness. In my first days, each step I took along the forest trails was underscored by a half-held breath, my mind snapping to every movement and rustle, and my body tensed like a deer, poised to flee. With every move I was aware that a misstep might lead to agonizing death from a bushmaster bite. Gradually, the paths became more familiar, but I still started when a toad, the size of a softball glove, loomed up in my light, and nearly leapt from my skin as a six-foot (and harmless) indigo snake as thick as my calf bolted from my descending foot. In the flat floodplain, with the vegetation so thick, and every buttressed tree draped in lianas looking much like every other, it is easy to lose the trail and become immediately disoriented. I could be lost for twenty minutes and be within just a few feet of the path.

At first light the birds started in with chorusing voices more than I could ever hope to identify. As the light gathered on my morning commute, the forest began to come awake and my heart ceased to race. The business of the jungle was underway, like the set-up of a Saturday market. A toucan alighted on a branch four feet from me and then flew off. Spider monkeys swung like gymnasts, splashing through the leaves, and passed like a brief summer thunderstorm. I was once nearly bowled over by a small herd of collared peccaries before they saw me and dashed off snuffling and snorting into the brush.

Walking along these trails, I felt that I travelled in the tissues of something itself alive—some great green, writhing organism. The intense heat of the tropical sun was diffused through layer upon layer of green; the air was warm and moist; scents hung heavily in the stillness; and jungle

voices rang with the tone of bells. The complexity of this place was so difficult for my mind to wrap itself around. There weren't hundreds, but thousands upon thousands of species of living things packed into every square acre, interwoven in a creation that's beyond my comprehension. The soaring trees are hung with lianas and epiphytes; there are soft and constant scurryings in the leaf litter, flutterings in the foliage. Nearly everything my eye could encompass was alive: there was no rocky outcrop, no glacier, no peak to offer contrast.

Arriving at a manakin territory, I set up my small stool, dropped my pack and sat, ready to let the forest settle in around me. My work was to watch and record the movements of courting blue-crowned and dwarf-tyrant manakins. The males establish a small arena, or lek, in the understory in which they sing and fan their feathers to attract females. The dwarf-tyrant manakins are drab olive-green, blending into the foliage like a trick of the forest light. They ceaselessly called: "ter-wik, ter-wik," and could keep up this mind-numbing behavior for hours.

Blue-crowns are a deeper green with a dark face and sky-blue streak painted across the top of their heads. Their call is a musical, hiccupping, "sweet, sweet, sweeterang, sweeterang," and they soon filled my notebook with their busy comings and goings. A male will display in shrubs about a foot off the ground, flitting and dancing from twig to twig, fluttering his wings and uttering little "seets" and raspy trills. If the female is impressed, she follows the male from perch to perch, flicking her wings rapidly whenever she alights on a twig. This goes on for several minutes, when suddenly they both fly off in opposite directions.

For nine hours each day, in three hour stints on three different leks, I noted every perch each territorial male used, every vocalization, every moment feeding, preening, and flirting with the females. At times the blood pooled in my legs, and my fingers cramped from trying to keep up with my notes. At other times I caught myself drifting off mindlessly when the birds vanished into the green.

These idylls were often intruded upon by the nibblings and crawlings of insect--the bulk of the tropical forest wildlife. Brush against a small shrub and you come away covered in nearly invisible baby ticks, which can only be eradicated later by pulling off hundreds at a time with duct tape. After every rain, mosquitos and leish flies swarm out, and the number and variety of ants are incomprehensible--set a pack down, and it's soon covered. A crackling in the leaf-litter, like soft rain on the roof, gives notice of a swarming mass of army ants, moving in a column ten feet wide. Race through the horde seething across your path and you are dancing your pants free of biting and angry legions. Place a hand against a tree, and you may howl from the bite of an Isula ant, called "veinte quatro" in Spanish because the anguish lasts twenty-four hours.

As the weeks rolled on toward the rainy season, the real plague of my hours became sweat bees. It turned out I was unique among all the residents of Cocha Cashu as an attractant for these insects. Gnat-sized and stingless, they could crawl through mosquito netting to softly lick the sweat from between my fingers and around my eyes--tickling, tickling. Crush one and a pungent pheromone wafts away, summoning dozens and hundreds more. Wave them away and the manakins flush from their perches, the bees alighting again in an instant. Twice I ran from study sites swatting and crying from swarms of licking, tickling bees blackening my hands, arms, and face. I became lunch for the forest, part of the food chain.

For several nights we ate fish for dinner, a gift from Aguilar, a cataract-afflicted Machuguenga Indian of indeterminate age. Aguilar came down the river to the station with his infant and toddler sons wracked by pneumonia. When they came, the director thought the boys near death, but offered injections of massive doses of antibiotics. The drugs worked a miracle and within a day both children could lift their heads and eat. Aguilar and his wife camped near the station for several days to bring the children in for medication, and soon both boys were on the mend. In gratitude, Aguilar

fished for us in the murky cocha, bringing us two of the 15-pound flat fish, somehow knowing precisely where to cast his hook despite his near-blindness.

There is a gradation of westernization along the river highway. The tiny settlements outside the park import goods from across the Andes, bringing in clothes, tinned food, plastics, petrol, and machinery. Farther into Manu Park, the Machuguenga live in traditional family communities. These are people who know every nuance of the forest who hunt, fish, gather fruit and plants, and farm a few crops within the jungle's rhythms. They are apothecaries of an entire pharmacopoeia of medicines made from the tinctures and leaves and bark of myriad plants cures for simple headaches and debilitating diseases such as leish maniasis, as well as hallucinogens that heighten perception, intensify the hunt and bring them closer to the spirits. But the Machuguenga have also acquired a taste for a few selected western conveniences, trading downriver for t-shirts and khakis, digital watches, machetes, cooking pots and penicillin.

On a day off, several of us took the canoe upriver to the Machuguenga camps to trade items for thatch to roof a new building at the station. The thatch is made of tediously-gathered palm fronds and, in the local economy, is expensive. In the Machuguenga village, actually the home of an extended family, several houses filled a small clearing. Propped three feet off the ground on stilts, the buildings have no walls, only steep-pitched, thatched roofs, with hammocks inside hanging from mahogany timbers. There were a few metal cooking pots, a couple of plastic basins.

I could not tell the relation of the dozen or so in the family sitting around chatting with the station director: an older couple, two young men, several young women with babies and toddlers scrambling around, staring at us wide-eyed. Lime-green pet parrots with clipped wings crawled from shoulder to shoulder. The family was as curious about us, and as shy, as we were about them. But smiles reached across the language gap, and a deal was made for the thatch that we loaded high into the canoe.

Many days up the Manu beyond these villages, I have been told, are Indians living a completely traditional life, whose only outside contacts are their neighboring Machuguenga. But beyond their villages, in the farthest and most remote corners of the region, are rumors of other tribes indigenous people not only never contacted by the Spanish or by Anglos, but never seen by their nearest neighbors. The movement of a shadow, a sign on a trail, the remains of a fleeting camp are the only clues to their existence. I suppose curiosity is universal, and we learned the Machuguenga are planning their own anthropological expedition to seek out these remote people. Unlike the Conquistadors, they say they must go with humility, purifying themselves and dressing only in their most traditional costume. They go as brothers instead of as warriors or conquerors, hoping to touch the unknown in peace instead of meeting the flick of a poison dart from the shadows.

I wonder at their motivation and our collective yearning to explore the unknown. Has being the subject of anthropological research infected the Machugenga with the same curiosity, taught them a methodology they want to try or given them the idea to preempt outsiders' expeditions? Or is it a solidarity they're seeking as settlers seep in over the Andes, laying claim to the forest and changing the Amazon land?

We are, most of us, used to moving in order to see the world. We are driven over the next rise, the next ridge, to see whatever has not presented itself to us yet, to add to the day's bird list, or perhaps to catch a glimpse of a bull elk or a hoary grizzly before it recedes up the mountain. We stalk. We track. We pursue. We want to feel our muscles strong and our blood coursing. With the exception of the hunter in a tree-stand, the fisherman on a sunny bank and the elderly who've learned better, it never occurs to us to stop and wait.

The first weeks of work in the jungle, I was restless with sitting nine hours each day. But I gradually found myself slipping into an alert rev-

erie, my mind quiet, my twitchings and fidgetings slowing into a new rhythm. Then quietly, leisurely, the forest began to come to me. A small deer, a white-tail not three-feet tall at the shoulder and with mule deer ears, stepped quietly by, just 20 feet off. Ears flicking, she sniffed the ground and melted into the foliage. A hummingbird alighted on a branch over my head and slipped into an afternoon torpor, remaining asleep for three hours. An agouti, a hoofed, piggy-looking rodent, snuffled through the understory. I quietly investigated a scrabbling in a nearby hollow palm and watched a tayra emerge, a two-foot-long weasel much like an arboreal otter, its coat gleaming, the rich almost-black brown of cowboy coffee. Tawny cat-sized squirrel monkeys and capuchins with intelligent old-men's faces came within six feet to peer as quizzically at me as I at them. A languid tamandua, a honey-colored ant-eater with a kangaroo-like tail, foraged its way through a palm over my head. Butterflies alighted to ride on my pen, their wings like a dried leaf when folded, then opening to reveal brilliant greens and blues.

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I was surrounded by a sea of new neighbors, coming to know their voices, their movements, a few of their names. But I only scratched the surface. I became keenly aware that I wouldn't last a week trying to feed myself here. Now I know to avoid sitting on logs, to watch for snakes, bushmasters in the leaf litter and fer de lance in the overhanging lianas. But I don't know how to hunt monkeys or tapirs, how to hook a fish in the murky water. I don't know the taste of agouti or peccary, which of the trees bear fruit and when, nor how to make use of palm and bamboo. I haven't a trace of an idea which plants might be medicinal, which edible, which would send me reeling into hallucinatory universes, which could snuff out my life. I made sense of this chaos by naming things, and chipped away at one small, crafted question by quantifying the flutterings of manakins.

One morning, while I was taking notes after a bout of activity on a blue-crowned manakin's lek, a troupe of capuchins passed, and in their wake I noticed the forest had suddenly fallen eerily still. Nothing moved, nothing buzzed or sang. I looked up and gazed into the eye of a smoke-gray bird, an eagle, just alighted, poised on a branch not 20 feet from where I sat. It perched in profile, alert, head stretched out, its startled eye bright and glittering. I gaped, and in a single beat the great bird lifted off like a ghost and was gone through the trees. My mind raced through possibilities. A harpy? Could it have been?

Harpy eagles are one of the rainforest's top predators. Rare and widely dispersed, they track across enormous territories. Keeping within the tree crowns, harpies hunt monkeys, sloths, snakes and other birds. They are secretive, and one of the few predators that cause concern for the arboreal tribes of primates trouping through the upper canopy. At the station, seeing a harpy had taken on an aura like spying Sasquatch with the exception that the bird is known to science, described, and a few are displayed in zoos. A wild harpy brings heart palpitations, and not a little admiration around our dinner table.

Back at the station, I pored through the bird guide and quizzed myself on clues: "World's most powerful bird of prey...conspicuous black bifurcated crest...gray with entire chest black...enormous yellow legs...heavy bill." Crested eagle? Just as rare, fully gray, but more slender. This bird was hefty. As I stared at the book's illustrations, I felt like an eye-witness to an accident searching for the truth amidst memory's tricks and inventions. My mind wrapped itself around the details of the artist's depictions and the uncertainties nagged. Finally,

the bird's sheer size convinced me.

Only one other harpy had been sighted over the season, and that by an ornithologist who has set world birding records. Fluffed and preening, I paraded into the kitchen and plopped down with the lunch crowd to present my prize. "Can I join the Harpy Eagle Club?" I inquired with self-satisfaction. The table fell silent.

"What did you see?" Jim, one of the senior biologists, asked.

"Massive gray raptor...big...perched just a moment...then flew off...just a glimpse, really."

The inquisition began. "Crest like a crown around its head, or standing up in the middle?"

"Well, I couldn't see it well...the head was stretched out and the crest down...umm, I'm not sure, really...."

"Color?"

"Umm...gray mostly...."

"No black breast?"

"Umm...I really couldn't see very well the way it was perched...but maybe..."

"Must have been a crested eagle," Jim concluded flatly, turning back to his lunch.

"But the bill and the feet...I've worked with eagles back home...like the difference between a bald and golden eagle...heavy...massive. There was nothing small about it."

"Umph. Must have been a crested."

All eyes on me, Sandra, Pepe and Guisella looking mortified, I stared at Jim as he sipped his soup and buried himself again in his reading, ending the argument. Though I'd experienced plenty of these challenges between birders, seeing people cut so quickly to size, I stumbled from the kitchen. The owner of the earlier harpy sighting caught up with me.

"Hey, it doesn't really matter crested or harpy, they're both rare. Either one is quite a record!"

"Yeah, I know, I know, but I really thought...."

"Well, you need to know something. Jim has worked here 15 years. He knows this place, done so much of the seminal work here. But in 15 years he's never seen a harpy."

It is now mid-November and the rainy season is beginning. In the coming months the low forest will flood and fish will swim over what is now dry forest floor, nibbling on fruit dropped by the trees. Last night, in the candle glow of the library, I thought back over all the little glimpses I was given into the heart of Manu and into the people who inhabit this place the Machugenga who have been here for generations, the new settlers and our small tribe that migrated to Manu for such a brief time. After four months, what do I know of this forest?

We pack and load the canoe under a brilliant azure morning and slip without formality from the 105th beach into the current of the Manu. A single bend and Cocha Cashu is behind us, the outboard motoring us toward longed-for showers, pizza and loved ones. Because bandits, possibly Sendero Luminoso guerillas, have robbed trucks going over the mountain passes we are unable to drive out to Cuzco, so at Boca Manu we disembark and trundle our duffles out to a small landing. The whine of a little Cessna soon fills the air and the plane drops like some alien craft onto the strip.

We lift off, the jungle dropping away, the myriad greens melting together into one hazy shade. In an hour we will be back amidst the cars, asphalt, restaurants, hotels and clamor of Cuzco. I see the river glinting silver, snaking away behind us. The forest stretches from horizon to horizon, the canopy cresting and undulating like gentle waves. Our plane suddenly banks and heads into the blue, lifting us from our life in Manu as though gently waking us from a dream. As the rainforest flattens beneath us, the manakins, Aguilar and his family, the tapirs, tamarins, and the cathedral of green are sifted into memory. The prizes I take away, the landscape I "own," and all my efforts to experience and understand the forest all that is left in my cupped palms as I leave this place are simply more questions.

Chris Paige is a wildlife biologist and writer. She lives in Missoula, Montana with her husband and canine and feline friends.

PROFILE

Former Forester Offers Local Solutions

by Meg Hahr

Early this October, the United States Fish and Wildlife Service held public meetings throughout western Montana and central Idaho to gather local citizens' comments regarding the plan to reintroduce grizzly bears into the Selway-Bitterroot ecosystem. Hundreds of people attended the meetings and voiced a variety of opinions ranging from bitter opposition to excited anticipation. I attended two of the meetings, in Hamilton and Missoula, Montana, because I was interested to hear how local Montanans felt about the plan to relocate grizzlies into the mountains behind their communities.

Bud Moore, retired Condon, Montana, resident and author of *The Lochsa Story*, was among those who spoke at the Missoula hearing. Although he could have identified himself in a number of ways, Moore chose simply to say, "I am Bud Moore, and I am here to represent the bears."

Bud did not read a prepared statement directed at the federal agents responsible for the plan. Instead, he addressed the room full of people in front of him. He responded to the concern expressed by ranchers that returning grizzlies to the Salmon-Selway would threaten both the safety of humans and livestock. Referring to his experiences growing up in the Bitterroot valley, where he was born in 1917, and years spent hunting, trapping and working for the forest service in the Lochsa country of the Salmon-Selway ecosystem in central Idaho, Moore tried to assuage the fears of his neighbors. "I don't worry about grizzlies coming out of the mountains and killing livestock, because they never did. Generations [of people] never saw the grizzlies, unless they went up into the mountains," he explained.

Bud came down to the hearings from his home just outside in the Swan valley. He told the crowd, "Up in our valley, grizzlies are not abundant, but common. They move from up in the Swan Range down to the valley and up into the Mission Mountains. There are four major linkage zones in the valley, lots of good habitat for bears and very few problems. It's almost impossible to move somewhere else when you've lived side by side with an animal as charismatic as the grizzly bear."

Bud stood out from the many people who spoke at the hearings because he was one of the only people present who had actually spent the better part of a life coexisting with grizzly bears. Bud's words assumed greater significance because he was living proof that humans and grizzlies could inhabit the same place. Interested in his comments and his life, I approached Bud during the break, introduced myself and asked if I could visit with him at his home in the Swan. Bud enthusiastically agreed, and the following week I found myself driving toward the Swan Valley in an old Toyota pick-up borrowed from a friend.

It was raining when I left Missoula, but snowing lightly by the time I turned north onto the Swan highway. I followed the narrow road through the dense Douglas-fir forest and around lakes that reflected the pewter color of the sky. The colorless snow, the gray sky and the dark, overarching forest, by contrast, made the yellow-orange aspen and larch appear even brighter and more fragile. Once off the main road, I followed Bud's perfect directions down a muddy, windy dirt road for a couple of miles until the road dead-ended in front of a sawmill and log pile.

Bud was standing outside in the drizzle, wearing a red and black checked hunting cap and a Carhartt jacket. Despite his 80 years, he was working alone, hauling logs towards the mill. Af-

ter a quick tour of the sawmill, Bud invited me inside for a hot lunch of homemade venison stew and bread. We headed up to the house, a beautiful log home Bud built himself, situated next to a small pond and surrounded by forest. Inside, he heated up the stew and we sat down to lunch.

I told Bud I had recently read his book, *The Lochsa Story*, while doing trail work for the Forest Service in the Selway-Bitterroot Wilderness in Idaho. I knew that, for many reasons, Bud is considered an authority on forest issues in the northern Rockies. Born and raised in western Montana's Bitterroot valley, Bud started working for the U.S. Forest Service (USFS) in the Clearwater National Forest in Idaho in 1934 when grizzlies were still common in the upper tributaries of the Lochsa River. Working seasonally on trail and fire crews during his early years with the USFS, Bud spent his winters trapping alone in the Lochsa's rugged interior. From 1949 to 1956, Bud served as district ranger of the Powell district on the upper Lochsa. Under his direction, the first game survey and timber management plan for the Powell district were completed.

Bud's career with the Forest Service eventually took him far away from the mountains he loved so much. From 1956 until his retirement in 1974, Bud lived and worked for the Forest Service in Washington, D.C.. Finally, in 1974, Bud returned to Montana. Moving with him was his wife, Janet, whom Bud met and married back East. Together they bought 80 acres of land in the Swan Valley which they named Coyote Forest and another 167 acres near the town of Ovando.

Bud and Janet devoted all of their time to the construction of their log home and the management of their commercial forest and sawmill. To make money to finance their small business, Bud spent the winter months trapping, a skill he learned as a young man in the Bitterroot Mountains. According to Bud, their life in the Swan Valley was structured by the seasons. "The summer was for operating the mill; the fall, woodcutting and hunting; the winter, trapping; and the spring, writing," Bud recalled.

I had hoped to meet Janet, but Bud explained that she had gone into town for the day. I wondered what it must have been like for her to move from the East to rural Montana and carve out a homestead in grizzly bear country. Bud explained that the transition was hard for her at first, but she quickly became involved in the community and even served a couple of terms on the state legislature.

After lunch, Bud and I left the comfort of the warm cabin and went back outside. He pointed out the small building where he keeps his traps and prepares the pelts. One of the chapters I remember most from *The Lochsa Story* is the one in which Bud describes the winters he spent as a young man working a trap line deep in the interior of the Lochsa country. He would spend the harshest winter months alone, checking and preparing his traps and moving along the

line on snowshoes from cabin to cabin. Bud's description of the extreme weather, the solitude and the intense beauty of the winter landscape was unforgettable.

As we walked over to look at the different traps Bud uses to catch beaver, marten, coyote, ermine and other furbearers, I asked Bud if they see a lot of wildlife around their place. Just the other day, Bud said, a friend of his saw a grizzly while he was loading firewood into his truck not far from Bud's house. The friend heard a loud "woof" and looked up to see the grizzly standing about 60 feet away. The two looked at each other for a minute and then the bear ran off. He was so excited that he drove right over to Bud's place and told him all about it.

Here in the Swan Valley, we are in a very unique position because we've still got all the parts. Not only do we have grizzly bears, bull trout and old growth, we also have a tolerant, energetic and well-informed public able to work with each other and with the government.

After showing me the traps, Bud took me over to his office, another log building that also serves as a bunkhouse for guests. While Bud lit a fire in the woodstove, I looked around at the maps and books lining the walls around his desks. As the room began to warm up, we sat down in comfortable chairs near the woodstove and resumed our conversation. I was interested in knowing more about Bud's book, *The Lochsa Story*. While living in Washington, DC, Bud told me, he took a two-year correspondence course in creative writing called the "Famous Writers Course." For his final project, Bud chose to write an outline for a book (which he hoped to someday write) about the Lochsa country of central Idaho. Drawing on personal experiences, conversations with "old timers" and extensive historical research, Bud completed *The Lochsa Story: Land Ethics in the Bitterroot Mountains* in 1980. In *The Lochsa Story,* Bud tells the story of the land and its human inhabitants beginning with the Nez Perce Indians and ending with the USFS. He tried to draw meaning from this long and varied history, finally concluding that the Forest Service's current management practices could not be sustained in the Lochsa country. According to Bud, the book ends with "a plea to slow down" the pace of the Forest Service's timber cutting program.

Bud brought *The Lochsa Story* around to a couple of regional publishers, but no one was interested in a book about forest management. There was interest in a personal story, but Bud didn't want to lose the bigger story and the meaning that story would convey. Instead of pursuing it any further, he put *The Lochsa Story* in a box and stuck it in a corner of his office, thinking that maybe someday someone would publish it after he was gone.

By 1990, many of the "old timers" mentioned in *The Lochsa Story* were "getting on in years," so Bud decided maybe he should try to have the book published again. This time, ten years later, there was a great deal of interest in the book, primarily *because* it dealt with forest management. Bud decided to go with Mountain Press Publishing Company in Missoula, Montana: "good local folks, good books, good people," he commented. They requested that Bud bring the story up to the present, so he took three years to rewrite it.

The Lochsa Story was published in 1996, the same year as Paul Hirt's history of the Forest Service since World War II, *A Conspiracy of Optimism.* Bud says that the two books are good companions. Hirt's book looks at national policy but comes to the same conclusion as *The Lochsa*

Story–the level of logging the Forest Service has pursued cannot be sustained over the long term. Bud explained, "The Forest Service has been telling Congress, 'If you just give us enough money to put high technology on the forests, we can give you as much timber as you need.' It took them a while to figure out that Americans don't want high-tech tree farms in place of natural forests. It's also too costly, and it just wouldn't work."

Bud continued to elaborate on the philosophy of the Forest Service: "Under traditional 'multiple-use' forest management, the land was seen as a storehouse. As a result, people looking at the same land saw different uses. Early foresters understood the connections but those who came after specialized and lost sense of the big picture. They looked at the functions rather than the wholeness."

I asked Bud about when things began to change. Bud answered, "After the Bolle report came out in the 1970s, some of the regional foresters here in Region 1 were saying, 'We can't do this.' People on the ground knew that multiple-use/sustained yield forestry wasn't working, but no one back in Washington wanted to hear it. We have to thank the environmentalists for throwing a few roadblocks in the way."

Commenting on the next step for forest management, Bud added, "What we need to do now is figure out what Nature is doing and listen. We need to work with, not against, Nature. That's what this new ecosystem management is all about."

Although Bud published *The Lochsa Story* twenty years after he retired from the Forest Service, he clearly hasn't left the realm of forest management. Bud has taken the wisdom gained from his forty-year career as a forester and more recent experience as owner of Coyote Forest, and he has applied it to a number of other local land stewardship endeavors.

Bud is one of the founding members of the Swan Valley *ad hoc* committee–a local citizen's group that has worked collaboratively with the Forest Service and Plum Creek Timber Company to manage forest lands in a way that benefits both the economy and the community. Bud explained that although many of the residents in the Swan Valley are retired, most make their living in some way or other from the expansive and productive forests filling the valley. Because most of the forests in the valley are owned by either the Forest Service or Plum Creek, Swan residents, for obvious reasons, feel that they are stakeholders in how this land is managed. When timber harvesting slows down or ceases because the forests have not been sustainably managed, it is the locals who suffer the most. According to Bud, it was this concern for the health and stability of the Swan's forests and economy that led some local residents to form the committee. Bud explained that the committee was not meant to be permanent, but rather to serve as a think tank. In time, though, the committee began addressing a variety of issues.

Bud articulated his feelings regarding his community and his personal land ethic. "Here in the Swan Valley, we are in a very unique position because we've still got all the parts. Not only do we have grizzly bears, bull trout and old growth, we also have a tolerant, energetic and well-informed public able to work with each other and with the government. The first priority is to be sure that we understand the ecological connections that make the land productive and able to perpetuate itself."

Bud described how the committee formed a partnership with the Forest Service to keep open the old Condon Work Center that the Forest Service planned to close because of budget cutbacks: "We knew that if they closed the work center, there would no longer be an administrative Forest Service presence in the community. We told them that we didn't want them to pull out, we wanted them to decentralize. They said, Every other community hates the Forest Service. Here, you don't want us to leave!'"

Working with the Forest Service, the committee was also able to arrange a small timber sale that was both ecologically sound and beneficial to the local economy. These experiences

with the *ad hoc* committee led Bud to the belief that environemntal issues can be handled successfully on the local level.

Bud also related to me another pivotal moment in his personal evolution. About ten years ago when Bud was about seventy, he became frustrated with the increasing conflicts he was witnessing over forest management issues. Leadership within both the environmental community and the timber industry expressed so much hostility towards people that Bud vowed "never again to contribute time, money or energy to anything that divides us more than we already are."

The committee also participated in the Elk Creek land exchange between the Forest Service and Plum Creek. Plum Creek land along Elk Creek was traded for Forest Service land elsewhere in the valley in order to protect important bull trout habitat. A local environmental group, Friends of the Wild Swan, disagreed with the *ad hoc* committee and appealed the land exchange because they did not believe it was a fair trade. Bud commented, "Unfortunately, I often see an unwillingness in the environmental community to things local. Local people have the good ideas that become national policy. What it comes down to is a matter of trust—if you can't trust your neighbors, what have you got?"

As our discussion on consensus and collaboration on the community level wound down, Bud and I found ourselves once again discussing the grizzly bear reintroduction. Bud said, "I have a great deal of compassion for those communities in Idaho and western Montana that are adjacent to the wilderness where we want to restore grizzlies. Up here in the Swan Valley, we like the bears. They are part of the mystique of the mountains. Our valley demonstrates that people can get along with grizzlies—it's a matter of attitude. With the right type of forest management and the support of industry, we can have grizzlies and logging. In the Swan, we practice light-on-the-land logging which means we log for bears. Timber is harvested with an understanding of what grizzlies need. In this way, we not only make a living off of the land, we also provide habitat for bears."

Based on his experience in the Swan, Bud added, "We can bring grizzlies back to the Bitterroot, but only if we put our trust in the local people. Having citizen management of the bear is a good idea. By allowing local communities to become stakeholders, we can keep things community oriented."

Bud concluded our talk with a more personal note: "When you get to be my age, you realize that you don't have a lot of time left, and you'd like to make the best use of it. Finally, I just asked myself, 'Where can I put my best lick?' If we can end the polarization, get people talking together again, then maybe we can find solutions to our problems. Let's get together, community by community, and put our trust in each other."

PHOTO BY KARL VESTER

PHOTO BY JEREMY PUCKETT

REFLECTIONS

Taking the Long Cut

by Caron Campbell

We had to squint against the sharp points of light stabbing our eyes, reflections from broken pieces of beer bottles littering the site. We climbed beyond the glass to the highest point on the hill and took in the full 360-degree view of the Yaak Valley. A gentle push of air mediated the heat of that July midday as we absorbed the grandeur of the place and explored the hilltop.

This was a side trip for me, an excursion off my planned route home. I had been drawn here by an impassioned reading by Rick Bass a few days earlier, a plea to save the Yaak from more roads and logging.

My visit with a friend in Libby on the way home to Seattle brought an unexpected pleasure: the companionship of a sixteen-year-old grandson of a longtime owner of a cabin in the Yaak Valley. Sam needed a ride home to the Puget Sound area, too, and was pleased to take some time to stomp around the Yaak first, a place of fond memories for him.

We were rewarded soon after entering the valley by spotting a moose, peacefully grazing in a quiet pool of the Yaak River at the side of the highway. Her proximity to the road both thrilled and worried me. We admired her for a while before driving on.

We pulled over at Yaak Falls, along with other passer-throughs like ourselves, and clambered joyfully over the rocks and into the waters playing there. Sam and I delighted in the chutes and froth and boulders. I carried an empty Slurpee cup left on the rocks back to my car for later disposal.

We stopped at the Mercantile in the town of Yaak to get a map and suggestions of places to sample the Valley. We were prepared to hike around for a few hours. They only had hunting maps, which mostly showed forest service roads. The friendly folks at the store and tavern suggested a drive up to the top of a hill near town for a good view.

I liked the quiet of the hilltop. We could hear the squabblings of ravens, the buzzing of insects in flight and the crunch of our footfalls in the broken glass. The litter was an obscene but not surprising discovery in a place accessed by road.

There was other debris, too: large pieces of buried rusting metal poking to the surface and chunks of building material. I thought this place must have had some kind of structure once, bolted to the rock to steady in storms. A fire lookout, perhaps?

I found a heart-shaped rock and kept it as a momento. I wondered where in that grand hilltop view Rick Bass dwelled and wrote his passions. We collected some manageable pieces of litter before leaving to cool our feet in the river below.

PHOTO BY KARL VESTER

Road to Somewhere

by Rachel Wray

I moved to Missoula, Montana, sight-unseen. Whispered impressions suggested it was a hip town, and national magazines lauded its recreational resources and progressive thinking. I paid attention. After being accepted into the Environmental Studies program at the University of Montana, I talked to both current and former residents, considered their opinions, and decided to make it my new home. And on a hot Arizona day in July, I packed up my Toyota and took off.

Missoula has lived up to its advance billing. Surrounded by breathtaking landscape, the town offers small-town sensibilities with urban awareness—a combination I find enchanting. I'm at home here. I've made friends, learned the shortcuts, found the cheapest places to eat lunch —all the necessities of a happy existence. And though we're standing on the cusp of winter—a formidable thought for this desert rat—I've no regrets.

Still, I can't help but think that the best part of moving to Missoula from Tempe was the eighteen or so hours it took me to get from point A to B. Barreling down the road, tunes turned up, my left arm hanging out the window waving to truck drivers: these are my most cogent and vivid experiences.

Highway 89 in Arizona, connecting Flagstaff to Page and the Utah border, stands out in my mind as bliss incarnated as I escaped an uninspiring job, suburban landscape, and repetitive lifestyle with only a vague idea of where that escape would lead. As Utah was laid out before me, anything seemed possible, and by the time I reached Idaho, I was sunburned by the incandescent potential Missoula held. Soon, desert gave way to lush mountains, and with each passing mile marker, my imagination revved.

Anticipation of the unknown is a powerful drug. Too giddy to eat, too nervous to sleep, I reveled in my car's simple northward motion, as if it, too, were propelled by the delicious thought of a new hometown. Possibilities and speculations swam in my head, but when my exit approached, all contemplation gave way to a wide smile and the simple acceptance that Missoula would be what I made it.

Thinking about that day makes me want to move again—not because I want to leave Missoula, but because I want to recapture the spirit of unfamiliar territory. I want to revisit the emotions that coursed through my body the day I arrived. It was like falling in love.

Caron Campbell is a nurse-midwife who practices the meaning of life in Seattle and wild places in the Northwest.

Rachel Wray is a graduate student in the Environmental Studies Department at the University of Montana. She is still seeking for the meaning of life.

BOOK REVIEWS

Heart and Blood: Living With Deer in America

by Richard Nelson
Alfred A. Knopf, 1997

Reviewed by Kelley Segars

"Perhaps only a person who hunts can penetrate the seeming paradox of loving a creature that you also stalk and kill and eat."

–Richard Nelson

Richard Nelson grew up in Wisconsin where "46 percent of the state's house holds report at least one hunter in residence." "Hunting," however, "had no place in our family; in fact, I grew up considering the whole business atavistic, arrogant, and immoral." It was only when doing anthropological fieldwork with Eskimo and Koyukon peoples that Nelson began to hunt and to enjoy hunting.

I, too, grew up in a society that was dominated by guns and camouflage pants, but my family did not hunt. I thought hunting was cruel and barbaric. I was raised on grocery-store meat and ate it unquestioningly until late in high school. When I found I could not reconcile the hamburger on my plate with the cow in the pasture, I became a vegetarian.

After reading Nelson's fifth book, *The Island Within*, I came to respect his hunting ethics, but I still was not drawn to participate in hunting. In *Heart and Blood*, Nelson is more emphatic in his praise of hunting as a way both to obtain food and participate in nature. As an anthropologist, he is a proponent of "active participation" in which the fieldworker learns about a culture as a functioning member instead of a passive, objective observer. Nelson experiences nature differently when he is hunting than when hiking or even gardening. He writes:

I am a living creature questing for its food. Whatever ambiguity I feel about the hunt, it now lies far beyond reach. And I say this: No tiller of soil, no herder of flocks, no gatherer of plants, no browser of grocery shelves will ever cross this same emotional terrain. As for me, I would rather be a rock on a hillside than exist without knowing in this way the animal who lives inside me and gives me life.

It is this kind of emphatic, sincere statement that has made me consider becoming a hunter. I have met Nelson several times and come to feel a deep respect for both his writing and his beliefs. When he says hunting is a completely different way of relating with the natural world, I wonder what I have been missing.

Heart and Blood begins with a prologue that will be familiar, but not repetitive, to readers of *Island*. Nelson's prose has matured in the eight years since that book was published, providing a different perspective on the island. The last chapter, "Heart of the Hunter," is also in the same style of *Island*. The rest of the book concentrates on explaining the problems with deer in the United States—primarily overpopulation—and exploring the role of hunting as a solution.

This book affected my thinking in two ways. One, as I've mentioned, is to make me accept hunting, as done by ethical, considerate hunters such as Nelson. The other is to make me realize how deer are connected to people in so many ways. As Nelson says, "We are bound together with deer in an intricate biological relationship centered around cultivated crops." Whether it be New York, Wisconsin or California, deer are killed to protect crops of soybeans, corn, grapes and nearly every other crop. Nelson visits farmers in California, New York and Wisconsin. More than half of Wisconsin's farmers reported deer damage totaling $36.7 million in 1984. Farmers can be compensated for up to $5000 of damages, but many farmers have damages exceeding that limit. In Pennsylvania, crop damage due to deer averages $100 million each

Making Peace

Start with apples. Pick as the frost lifts
in a nimbus of crows and the orchard rings
with harsh predictions. Pick a dawn
when the children of three nations
are pulled slack from the same rubble,
when a crowd of gaunt Somalis tease
a pile of dead white men
and tanks thunder
in Russia. Pick
indiscriminately.
Take pale fruit from the shelter
of inside limbs, any warped, wasp-gutted
end of season red left hanging. Pick fast
from a bad perch in an old tree in the chill
of early winter warnings. Pick them all.

Call in sick. In Detroit, two boys are shot
in a game of Truth or Dare and a man of God
admits the rape of parish children. Wash the apples
thoroughly. Use the sharpest knife, open them
with slick snaps, pile them to the lip
of a four gallon stock pot, add a dash
of pure water and cover to hurry the fire.
Boil until the juice gutters and pieces
bleed together, until the bulk of it sinks
in the stroke of a wooden spoon.
Save the flesh in a clean pot. Bury the rest
trowel-deep beneath the asters. Water well.

Throw open the kitchen windows. In Butte,
a girl gives birth in a toilet and flushes
and flushes. Taste the sauce, determine
a ration of sugar, measure spice
in cupped palm, cloves by the pinch,
vanilla by drops. Jack up the fire
until the kettle ticks and sauce rolls
with sores that burst and heal in clouds
of steam. Seal it all. Make tea.
Sit where the late autumn sun will touch
the flawless lines of fifteen Mason jars,
capped and hot to the touch. Listen
for the kiss, the quiet straining
of lids drawn to the brink, quivering
until the first gives in and the others follow
like bells.

– Judy Blunt

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